STIC Search Report
EIC 1700

205 STRUCTURES FROM SEARCH

STIC Database Tracking Number: 137918

TO: Eisa Elhilo
Location: REM 9A60
Art Unit : 1751
November 19, 2004

Case Serial Number: 10/658409

From: Kathleen Fuller
Location: EIC 1700
REMSEN 4B28
Phone: 571/272-2505
Kathleen.Fuller@uspto.gov

Search Notes

205 STRUCTURES FROM THE SEARCH. 44 CA REFERENCES, ONLY 2 ON HAIR ORKERATINIC USE. ONE IS THE APPLICANT. I ALSO PRINTED 36 CA REFERENCES ON USE AS A DYE.

STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher or contact*:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1713*
- *Relevant prior art* ***found****, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art* ***not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28

=> FILE REG
FILE 'REGISTRY' ENTERED AT 15:05:26 ON 19 NOV 2004

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 NOV 2004 HIGHEST RN 783276-57-3
DICTIONARY FILE UPDATES: 17 NOV 2004 HIGHEST RN 783276-57-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

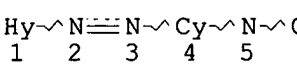
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> FILE HCAPLU
FILE 'HCAPLUS' ENTERED AT 15:05:31 ON 19 NOV 2004

FILE COVERS 1907 - 19 Nov 2004 VOL 141 ISS 22
FILE LAST UPDATED: 18 Nov 2004 (20041118/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE L14
L5 SCR 1841
L7 STR



205 structures from the query – Claim 1

NODE ATTRIBUTES:
NSPEC IS R AT 7
DEFAULT MLEVEL IS ATOM
GGCAT IS MCY UNS AT 4

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

GGCAT IS MCY UNS AT 6
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M1 N AT 1

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE
L10 205 SEA FILE=REGISTRY SSS FUL L7 AND L5
L11 44 SEA FILE=HCAPLUS ABB=ON L10
L12 1 SEA FILE=HCAPLUS ABB=ON L11(L)(HAIR OR KERAT?)
L13 2 SEA FILE=HCAPLUS ABB=ON L11 AND (HAIR OR KERAT?)
L14 2 SEA FILE=HCAPLUS ABB=ON L12 OR L13

#44 CA references

only 2 on utility

=> D L14 1-2 BIB ABS IND HITSTR

L14 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:203174 HCAPLUS
DN 140:258597
TI Composition for the dyeing of human **keratin** fibers containing a monocationic monoazo dye
IN David, Herve; Berteuil, Nathalie; Vidal, Laurent
PA L'oreal, Fr.
SO Fr. Demande, 61 pp.
CODEN: FRXXBL
DT Patent
LA French

applicant

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2844269	A1	20040312	FR 2002-11186	20020910
	FR 2844269	B1	20041015		
	EP 1398355	A1	20040317	EP 2003-292224	20030910
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2004127692	A1	20040701	US 2003-658409	20030910
PRAI	FR 2002-11186	A	20020910		
	US 2002-410311P	P	20020913		

OS MARPAT 140:258597
AB A new composition for the dyeing of human **keratinous** fibers and more particularly of the **hair**, comprises a monocationic monoazo dye (preparation given). Thus, 2-(4-amino-N-(4-(N-(2,5-dimethyl)-pyrrolophenyl))-phenylazo)-1,3-dimethyl-3H-imidazol-1-ium chloride (I) was prepared by the reaction of 2-(4-amino-N-(4-aminophenyl)-phenylazo)-1,3-dimethyl-3H-imidazol-1-ium hydrochloride with 2,5-hexanedione. Formulation of a **hair** dye containing 0.3% I is disclosed.
IC ICM C07D403-12
ICS A61K007-13; C07D233-61; C07D207-323
CC 62-3 (Essential Oils and Cosmetics)
ST **hair** dye cationic azo dye
IT **Hair** preparations
(dyes; composition for dyeing of human **keratin** fibers containing monocationic monoazo dye)
IT Azo dyes
(mono-; composition for dyeing of human **keratin** fibers containing monocationic monoazo dye)
IT **669077-29-6P 669077-31-0P 669077-32-1P**

669077-33-2P 669077-34-3P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(composition for dyeing of human **keratin** fibers containing monocationic monoazo dye)

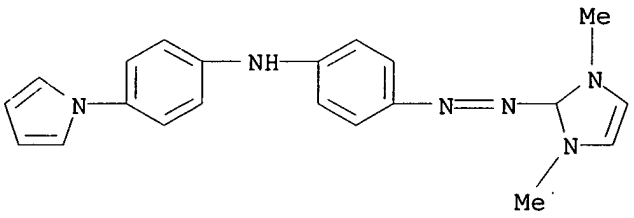
IT 64-19-7, Acetic acid, reactions 110-13-4, 2,5-Hexanedione 583-05-1, 1-Phenyl-1,4-pentanedione 3214-41-3, 2,5-Octanedione 178822-03-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(composition for dyeing of human **keratin** fibers containing monocationic monoazo dye)

IT **669077-29-6P 669077-31-0P 669077-32-1P**
669077-33-2P 669077-34-3P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(composition for dyeing of human **keratin** fibers containing monocationic monoazo dye)

RN 669077-29-6 HCAPLUS
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-[[4-(1H-pyrrol-1-yl)phenyl]amino]phenyl]azo]-, acetate (9CI) (CA INDEX NAME)

CM 1

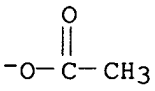
CRN 669077-28-5
CMF C21 H21 N6



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

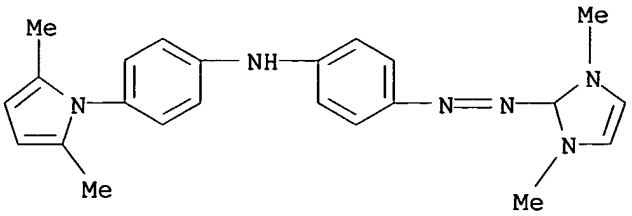
CRN 71-50-1
CMF C2 H3 O2



RN 669077-31-0 HCAPLUS
CN 1H-Imidazolium, 2-[[4-[[4-(2,5-dimethyl-1H-pyrrol-1-yl)phenyl]amino]phenyl]azo]-1,3-dimethyl-, acetate (9CI) (CA INDEX NAME)

CM 1

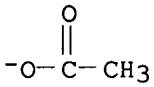
CRN 669077-30-9
CMF C23 H25 N6



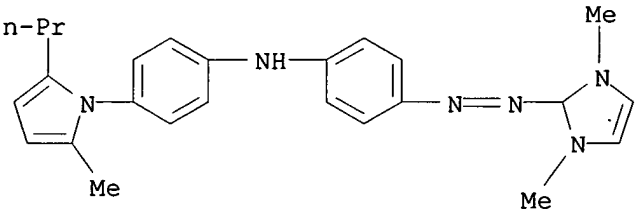
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 71-50-1
CMF C2 H3 O2

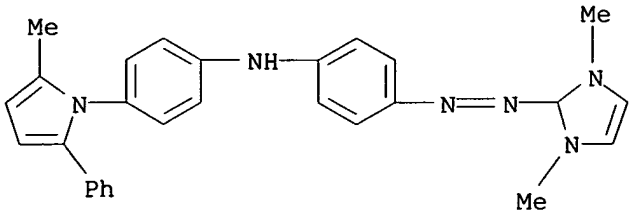


RN 669077-32-1 HCAPLUS
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-[[4-(2-methyl-5-propyl-1H-pyrrol-1-yl)phenyl]amino]phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



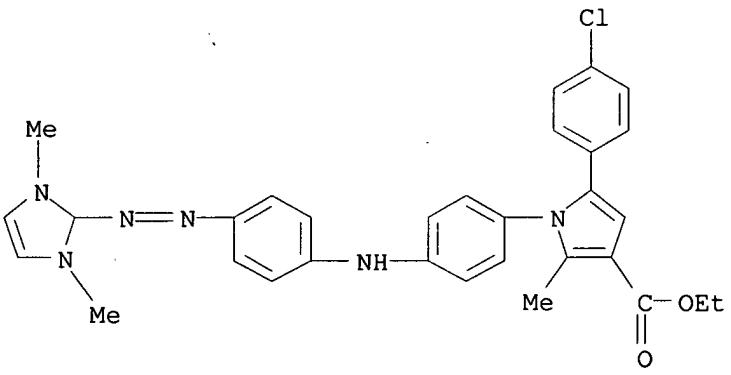
● Cl^-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 669077-33-2 HCAPLUS
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-[[4-(2-methyl-5-phenyl-1H-pyrrol-1-yl)phenyl]amino]phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 669077-34-3 HCAPLUS
CN 1H-Imidazolium, 2-[[4-[[4-[5-(4-chlorophenyl)-3-(ethoxycarbonyl)-2-methyl-1H-pyrrol-1-yl]phenyl]amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:659462 HCAPLUS
DN 131:287742
TI Reactive dyes and their use
IN Brock, Earl David; Lewis, David Malcolm; Yousaf, Taher Iqbal
PA The Procter & Gamble Company, USA
SO PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 9951684 A1 19991014 WO 1998-US6559 19980402
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
AU 9868806 A1 19991025 AU 1998-68806 19980402
WO 9951685 A1 19991014 WO 1999-US7293 19990401
W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9934664 A1 19991025 AU 1999-34664 19990401
EP 1066345 A1 20010110 EP 1999-916316 19990401
EP 1066345 B1 20030312
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
AT 234343 E 20030315 AT 1999-916316 19990401
JP 2003522209 T2 20030722 JP 2000-542401 19990401
CN 1115363 B 20030723 CN 1999-806875 19990401
ES 2192043 T3 20030916 ES 1999-916316 19990401
US 6518407 B1 20030211 US 2001-647580 20010213
PRAI WO 1998-US6559 A 19980402
WO 1999-US7293 W 19990401
OS MARPAT 131:287742
AB Reactive dyes are disclosed comprising: (a) at least one chromophore moiety, (b) at least one nitrogen-containing heterocycle, (c) a linking group to link each chromophore moiety to each nitrogen-containing heterocycle; characterized in that at least one nitrogen-containing heterocycle is substituted with at least one thio derivative and at least one quaternized nitrogen derivative The reactive dyes have high exhaustion and fixation Values, particularly on cellulosic substrates such as cotton, and show significant improvements in terms of reducing spent dyes in effluent, increasing dye affinity to the substrate, increasing the dye-substrate covalent bonding, increasing the ability to dye substrates at room temperature, decreasing the amount of dye that is removed during the post dyeing "soaping off process" and therefore simplifying the post dyeing "soaping off process" traditionally associated with dyeing cotton with fiber reactive dyes, and reduction of staining of adjacent white fabrics. In addition, the prepared dyes provide more intense dyeings and require less levels of salt for dyeing cotton substrates. In an example, Procion Red MX-8B is treated with mercaptoacetic acid and then isonicotinic acid to give a dye.
IC ICM C09B062-02
ICS C09B062-503
CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 40, 45, 62
ST reactive dye nitrogen heterocycle deriv prodn; quaternary ammonium reactive dye deriv prodn; thio deriv reactive dye prodn; cotton dye nitrogen heterocyclic compd
IT Textiles
(cotton; reactive dyeing with prepared nitrogen heterocycle reactive dyes

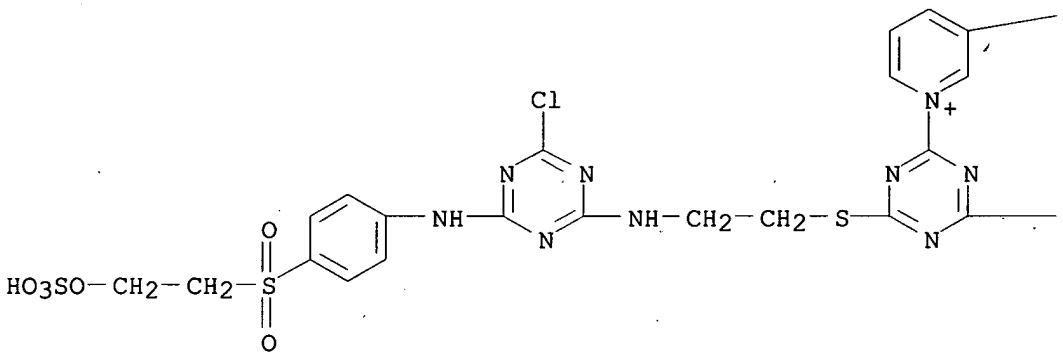
containing thio and quaternary ammonium groups)
IT Reactive azo dyes
Reactive dyes
(production of nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT Leather
(reactive dyeing with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT **Keratins**
Polyamide fibers, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(reactive dyeing with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT Textiles
(silk; reactive dyeing with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT Reactive dyeing
(with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT Textiles
(wool; reactive dyeing with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT 77-92-9, uses 110-16-7, 2-Butenedioic acid (2Z)-, uses 110-17-8, 2-Butenedioic acid (2E)-, uses 6915-15-7, Malic acid
RL: NUU (Other use, unclassified); USES (Uses)
(buffers for dyeing with prepared nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT 55-22-1DP, Isonicotinic acid, reaction products with halogen-containing dyes and thiols 59-67-6DP, Nicotinic acid, reaction products with halogen-containing dyes and thiols 60-24-2DP, Mercaptoethanol, reaction products with halogen-containing dyes and amines 68-11-1DP, Mercaptoacetic acid, reaction products with halogen-containing dyes and amines 70-49-5DP, Mercaptosuccinic acid, reaction products with halogen-containing dyes and amines 108-77-0DP, Cyanuric chloride, reaction products with sulfatoethylsulfonylaniline, halogen-containing dyes, thiols and amines 123-81-9DP, Ethylene glycol bis(thioglycolate), reaction products with halogen-containing dyes and amines 280-57-9DP, DABCO, reaction products with halogen-containing dyes and thiols 1118-68-9DP, Dimethylaminoacetic acid, reaction products with halogen-containing dyes and thiols 2494-89-5DP, 4-(2-Sulfatoethylsulfonyl)aniline, reaction products with cyanuric chloride, halogen-containing dyes, thiols and amines 12226-08-3DP, Procion Red MX 8B, reaction products with thiols and amines 71902-16-4DP, Drimarene Brilliant Red K 4BL, reaction products with thiols and amines 246220-94-0DP, Drimalan Red F-B, reaction products with thiols and amines 246255-73-2P **246255-74-3P 246255-76-5P** 246255-78-7DP, reaction products with halogen-containing dyes and amines
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; production of nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT 51-85-4, Cystamine 59-67-6, Nicotinic acid, reactions 68-11-1, Thioglycolic acid, reactions 106-50-3, 1,4-Benzenediamine, reactions 108-77-0, Cyanuric chloride 2494-89-5, 4-(2-Sulfatoethylsulfonyl)aniline 70865-29-1, Procion Yellow MX 8G 204995-91-5, Levafix Golden Yellow E-G
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; production of nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)
IT **246255-74-3P 246255-76-5P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye; production of nitrogen heterocycle reactive dyes containing thio and quaternary ammonium groups)

RN 246255-74-3 HCAPLUS

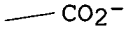
CN Pyridinium, 1-[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-[[2-[[4-chloro-6-[[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]thio]-1,3,5-triazin-2-yl]-3-carboxy-, inner salt, disodium salt (9CI) (CA INDEX NAME)

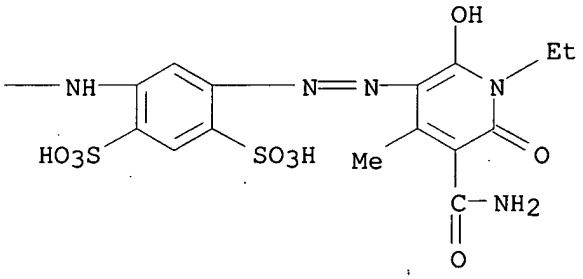
PAGE 1-A



●2 Na

PAGE 1-B



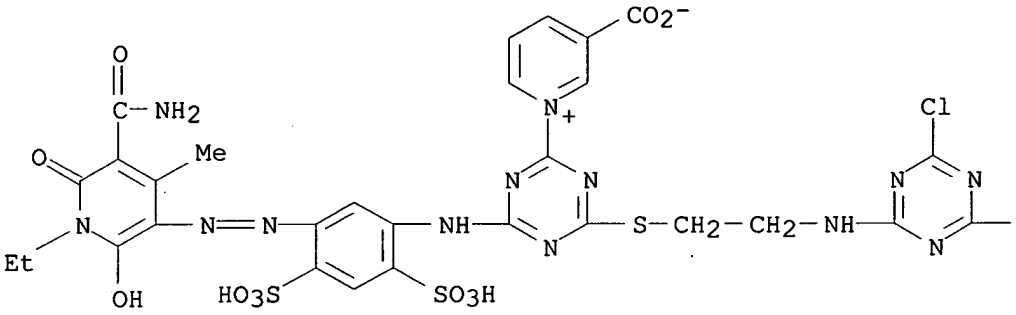


RN 246255-76-5 HCAPLUS

CN Pyridinium, 1,1'-[1,4-phenylenebis[imino(6-chloro-1,3,5-triazine-4,2-diyl)imino-2,1-ethanediylthio[6-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-

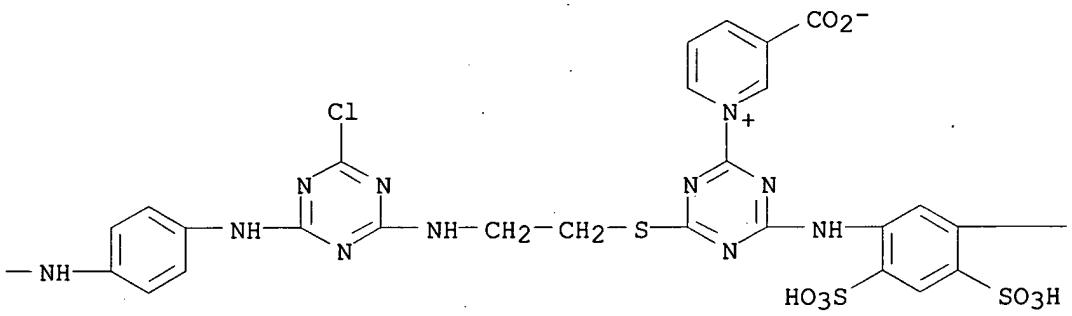
1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, bis(inner salt), tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

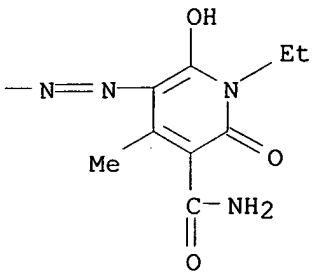


●4 Na

PAGE 1-B



PAGE 1-C



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D QUE
L5 SCR 1841
L7 STR

Hy~N=N~Cy~N~Cy~N
1 2 3 4 5 6 7

NODE ATTRIBUTES:
NSPEC IS R AT 7
DEFAULT MLEVEL IS ATOM
GGCAT IS MCY UNS AT 4
GGCAT IS MCY UNS AT 6
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M1 N AT 1

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE
L10 205 SEA FILE=REGISTRY SSS FUL L7 AND L5
L11 44 SEA FILE=HCAPLUS ABB=ON L10
L12 1 SEA FILE=HCAPLUS ABB=ON L11(L)(HAIR OR KERAT?)
L13 2 SEA FILE=HCAPLUS ABB=ON L11 AND (HAIR OR KERAT?)
L14 2 SEA FILE=HCAPLUS ABB=ON L12 OR L13
L15 38 SEA FILE=HCAPLUS ABB=ON L11(L)DYE?
L16 36 SEA FILE=HCAPLUS ABB=ON L15 NOT L14

structures as dye

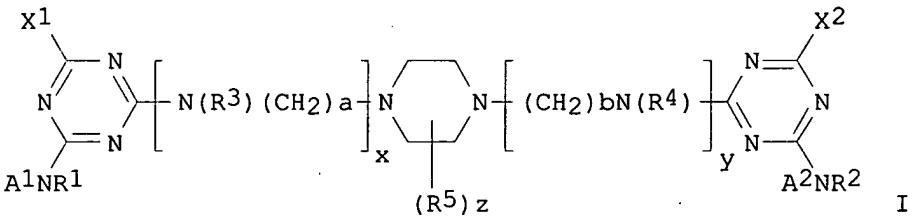
=> D L16 BIB ABS HITSTR

L16 ANSWER 1 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:36726 HCAPLUS
DN 140:95572
TI Reactive azo dyes, their production and their use
IN Ebenezer, Warren James; Russ, Werner

PA Dystar Textilfarben G.m.b.H. & Co. Deutschland K.-G., Germany
SO Eur. Pat. Appl., 48 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1380621	A1	20040114	EP 2003-15256	20030707
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004107517	A1	20040610	US 2003-611438	20030701
ZA 2003005261	A	20040210	ZA 2003-5261	20030708
BR 2003002363	A	20040824	BR 2003-2363	20030708
JP 2004043809	A2	20040212	JP 2003-195297	20030710
CN 1477159	A	20040225	CN 2003-146641	20030710
PRAI GB 2002-15982	A	20020710		

OS MARPAT 140:95572
GI



I

AB The invention discloses reactive azo dyes (I; A1, A2 = aromatic sulfo-containing azo moiety; R1, R2, R3, R4, R5 = H, optionally substituted alkyl; X1, X2 = fiber-reactive atom or group; x, y = 0, 1 whereby at least one of x and y is 1; a, b = 2-5 and when each of x and y is 1, a > b; z = 0, 1, 2, 3, 4), processes for their preparation, and their use for dyeing and printing hydroxy- and/or carboxamido-containing fiber materials. I provide strong, bright, and economic shades on textiles. In an example, 1-(2-aminoethyl)piperazine was treated in succession with 2 different monoazo dyes each containing a dichlorotriazine group to give a disazo bis(chlorotriazine) reactive dye (λmax 491 nm).

IT **644987-87-1P 644988-11-4P 644988-13-6P**
644988-15-8P 644988-16-9P 644988-53-4P
645405-61-4P 645405-63-6P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**dye**; production of chlorotriazine reactive **dyes** containing piperazine groups)

RN 644987-87-1 HCAPLUS

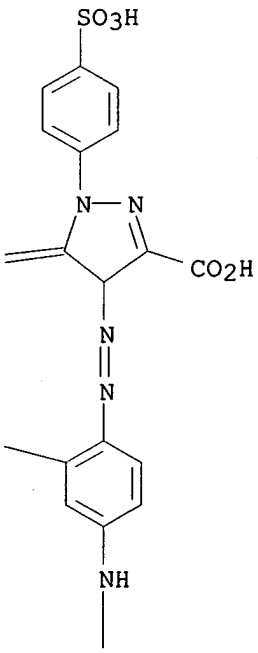
CN 1H-Pyrazole-3-carboxylic acid, 4-[[4-[[4-chloro-6-[4-[2-[[4-chloro-6-[[9,10-dihydro-9,10-dioxo-2-sulfo-4-[[3-[[2-[(2-sulfoethyl)amino]ethyl]sulfonyl]phenyl]amino]-1-anthracenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]azo]-4,5-dihydro-5-oxo-1-(4-sulfophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

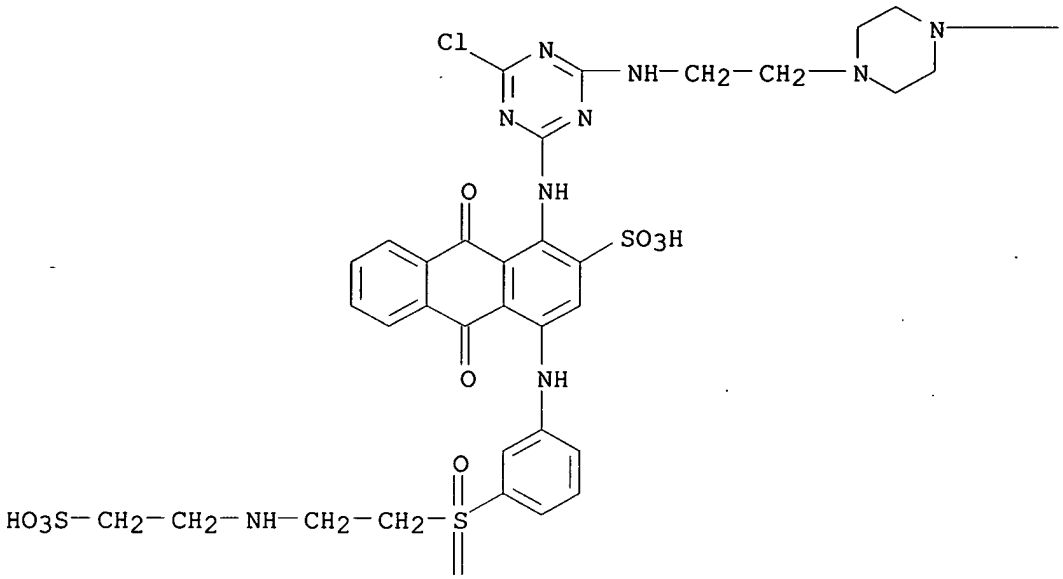
O=

HO_3S—

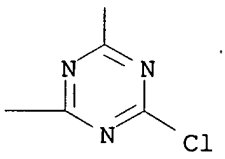
PAGE 1-B



PAGE 2-A



PAGE 2-B

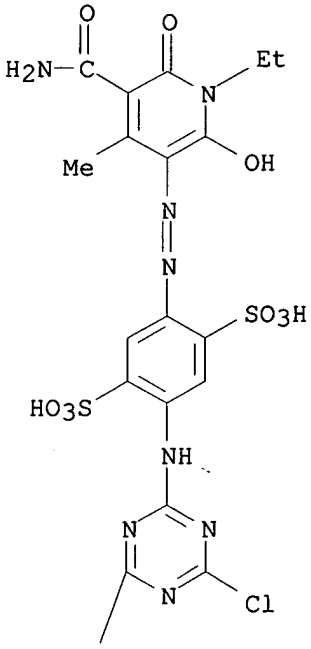


PAGE 3-A

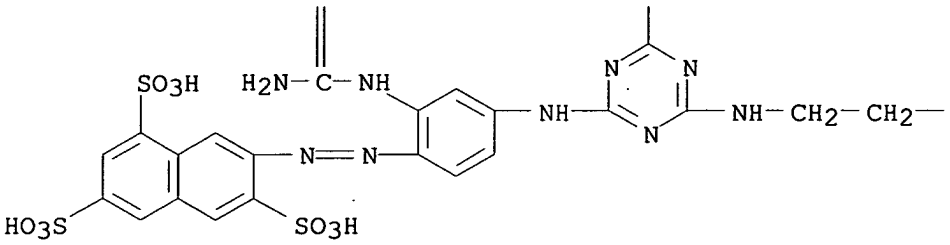
RN 644988-11-4 HCAPLUS
CN 1,3,6-Naphthalenetrisulfonic acid, 7-[[2-[(aminocarbonyl)amino]-4-[[4-[[2-[4-[4-[[4-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,5-disulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]phenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

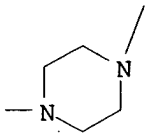
PAGE 1-B



PAGE 2-A

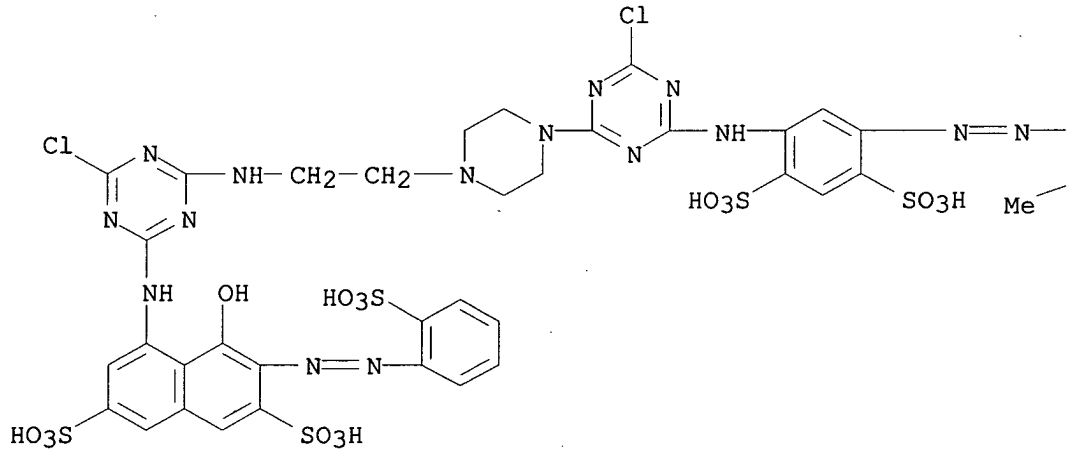


PAGE 2-B

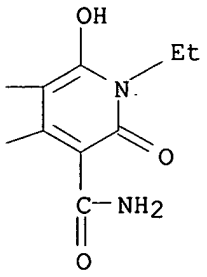


RN 644988-13-6 HCAPLUS
CN 2,7-Naphthalenedisulfonic acid, 5-[[4-[[2-[4-[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[(2-sulfophenyl)azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

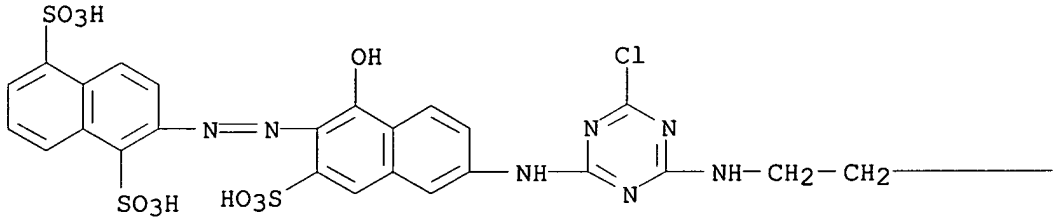


PAGE 1-B

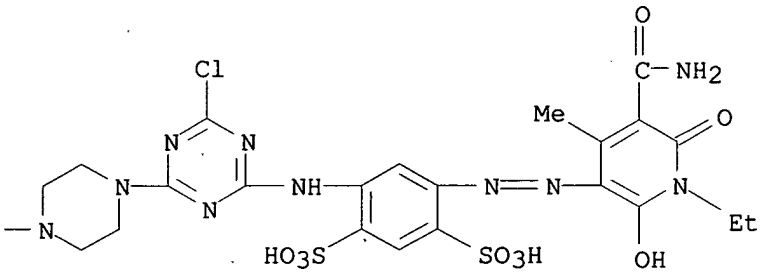


RN 644988-15-8 HCAPLUS
CN 1,5-Naphthalenedisulfonic acid, 2-[[6-[[4-[[2-[4-[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

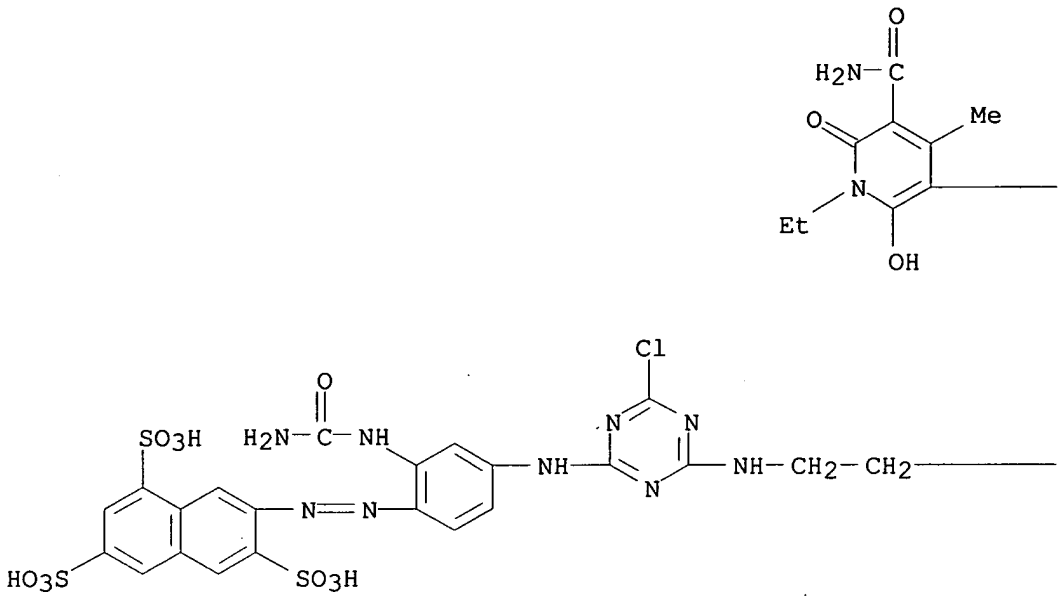


PAGE 1-B

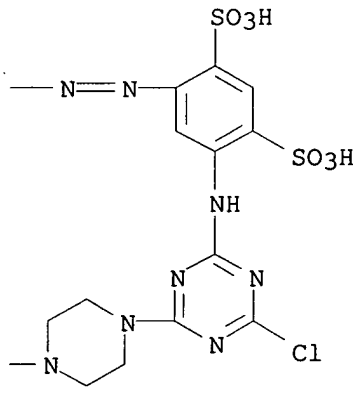


RN 644988-16-9 HCAPLUS
CN 1,3,6-Naphthalenetrisulfonic acid, 7-[[2-[(aminocarbonyl)amino]-4-[[4-[[2-[4-[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]phenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

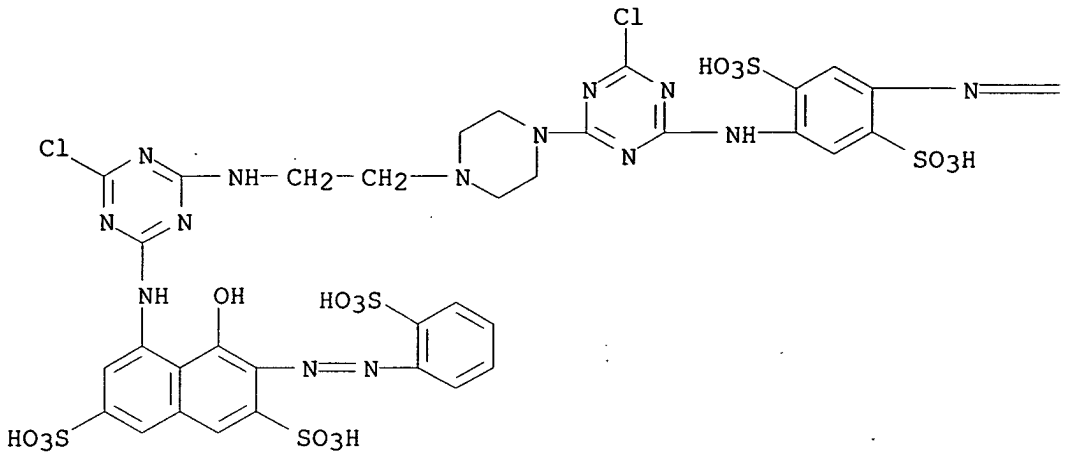


PAGE 1-B

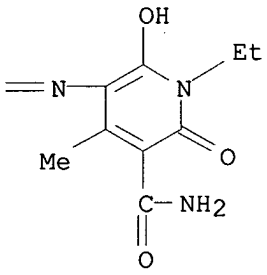


RN 644988-53-4 HCAPLUS
CN 2,7-Naphthalenedisulfonic acid, 5-[[4-[[2-[4-[4-[[4-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,5-disulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]-1-piperazinyl]ethyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]-4-hydroxy-3-[(2-sulfophenyl)azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

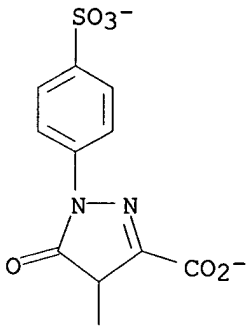


PAGE 1-B



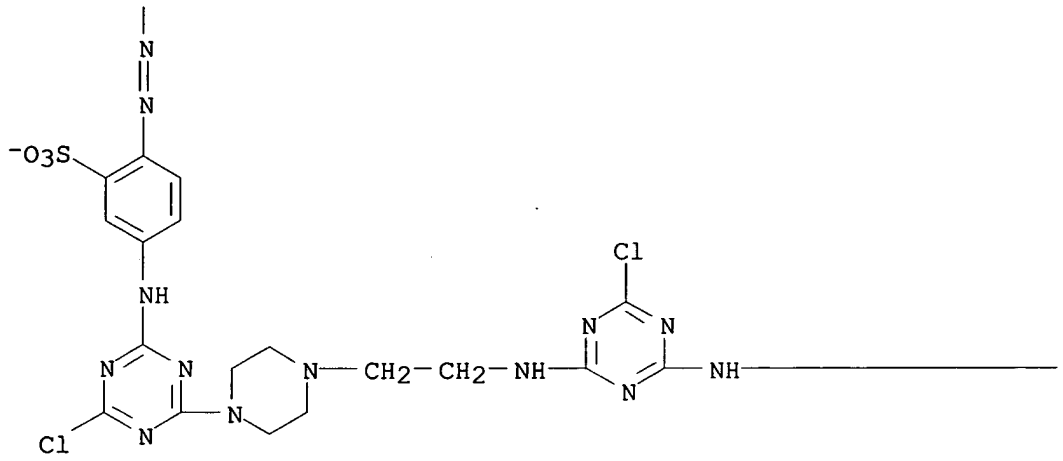
RN 645405-61-4 HCAPLUS
CN Cuprate(6-), [4-[[4-[[4-[4-[2-[[4-[[3-[[[[2-(carboxy-κO)-4-sulfophenyl]azo-κN2]phenylmethyl]azo-κN1]-2-(hydroxy-κO)-5-sulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-6-chloro-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]azo]-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazole-3-carboxylato(8-)]-, hexahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A

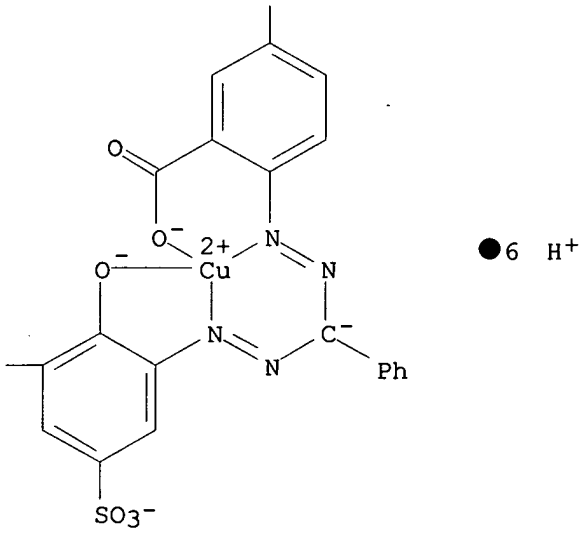


PAGE 1-B

PAGE 2-A

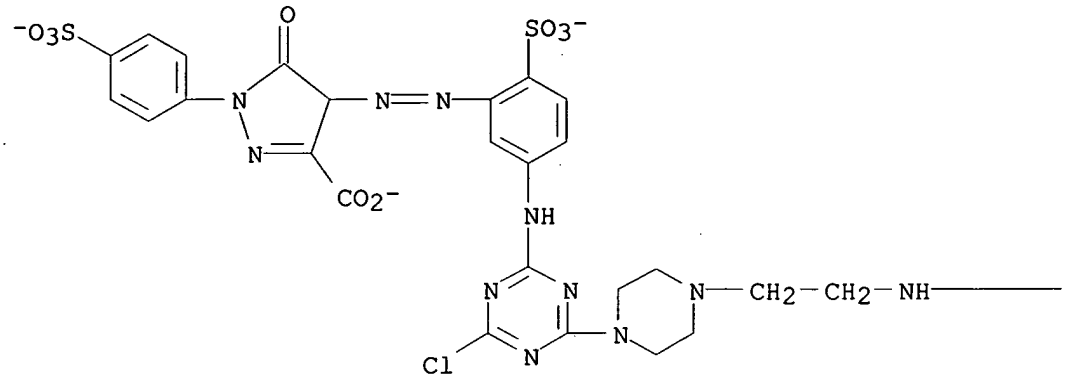


PAGE 2-B

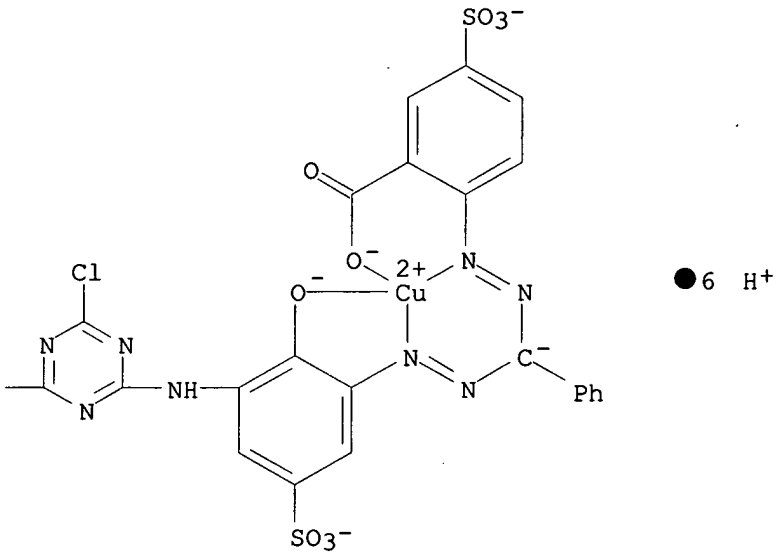


RN 645405-63-6 HCAPLUS
CN Cuprate(6-), [4-[[5-[[4-[4-[2-[[4-[[3-[[[[2-(carboxy-κO)-4-sulfophenyl]azo-κN2]phenylmethyl]azo-κN1]-2-(hydroxy-κO)-5-sulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]ethyl]-1-piperazinyl]-6-chloro-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]azo]-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazole-3-carboxylato(8-)]-, hexahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



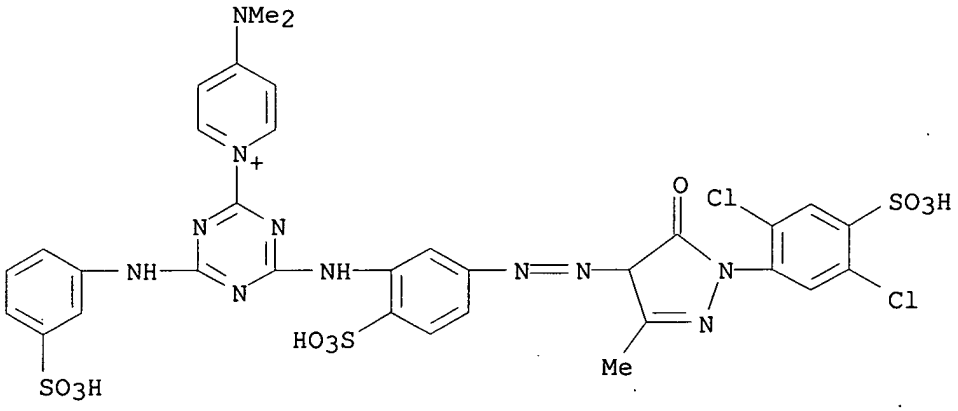
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D L16 BIB ABS HITSTR 2-36

L16 ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:473468 HCAPLUS
DN 137:248989
TI Reactive dyes with an active quaternary ammonium group
AU Szadowski, Jerzy; Niewiadomski, Zbigniew

CS Katedra Barwnikow, Politech. Lodzka, Lodz, Pol.
SO Przeglad Wlokienniczy + Technik Wlokienniczy (2002), (4), 22-24
CODEN: PWTWEA; ISSN: 1230-0381
PB Wydawnictwo SIGMA-NOT
DT Journal
LA Polish
AB A series of reactive dyes with an active quaternary ammonium group was obtained. The suitability of these dyes was investigated regarding dyeing of cotton (cellulose fibers) and wool (protein fibers) at different pH and temps. The effect of the alkalinity of the amine used in obtaining the quaternary ammonium groups on the properties of the obtained reactive dyes was investigated.
IT **461387-99-5 461388-00-1 461388-01-2**
461388-16-9
RL: TEM (Technical or engineered material use); USES (Uses)
(reactive **dyes** with an active quaternary ammonium group for cotton and wool **dyeing**)
RN 461387-99-5 HCAPLUS
CN Pyridinium, 1-[4-[[5-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-2-sulfophenyl]amino]-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]-4-(dimethylamino)-, chloride, trisodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

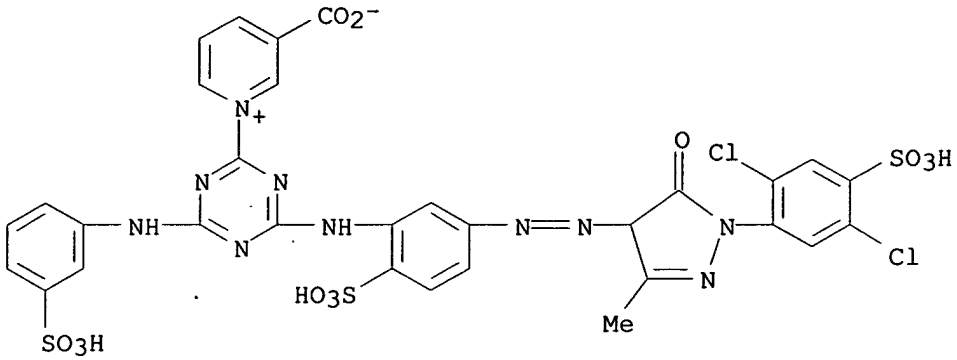


● Cl⁻

PAGE 2-A

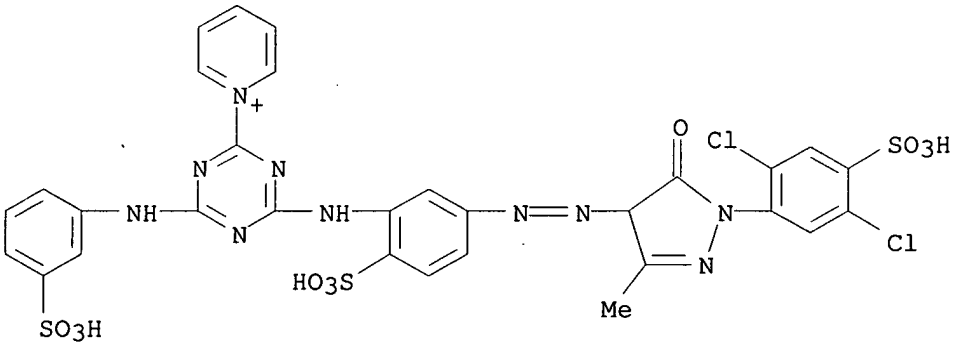
●3 Na

RN 461388-00-1 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[5-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-2-sulfophenyl]amino]-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]-, inner salt, trisodium salt (9CI) (CA INDEX NAME)



●3 Na

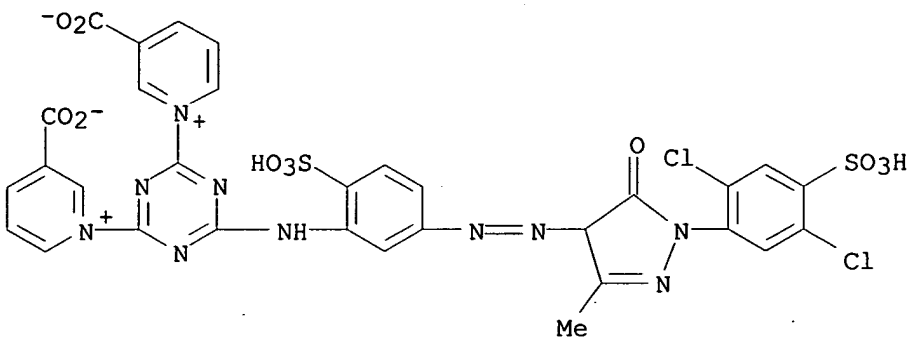
RN 461388-01-2 HCAPLUS
CN Pyridinium, 1-[4-[[5-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-2-sulfophenyl]amino]-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]-, chloride, trisodium salt (9CI) (CA INDEX NAME)



● Cl⁻

●3 Na

RN 461388-16-9 HCAPLUS
CN Pyridinium, 1,1'-[6-[[5-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-2-sulfophenyl]amino]-1,3,5-triazine-2,4-diyl]bis[3-carboxy-, bis(inner salt), disodium salt (9CI) (CA INDEX NAME)



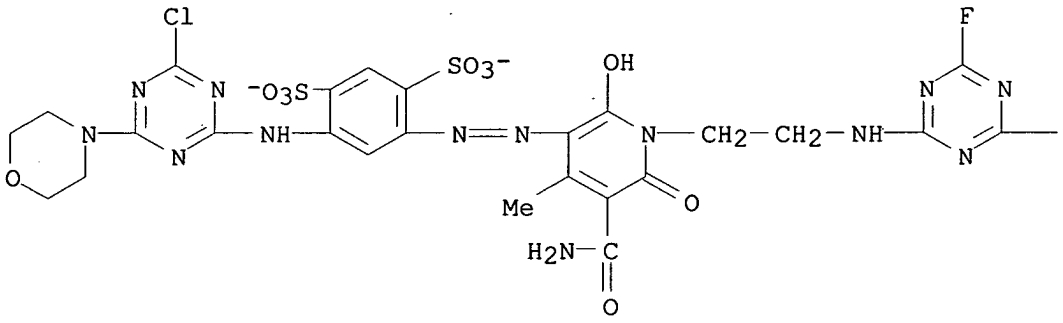
●2 Na

L16 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:694452 HCAPLUS
DN 133:297654
TI Dye having good combine stability with fibers
IN Tzikas, Athanassios; Klier, Herbert
PA Ciba Specialty Chemicals Holding, Inc., Switz.
SO Jpn. Kokai Tokkyo Koho, 36 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

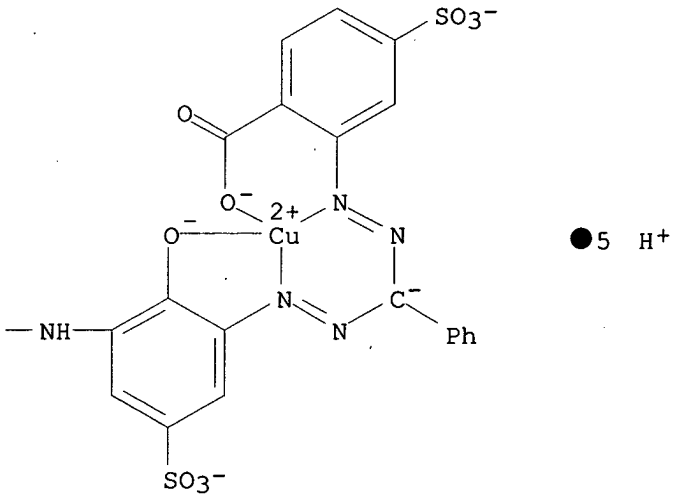
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000273339	A2	20001003	JP 2000-74265	20000316
	EP 1041121	A1	20001004	EP 2000-810226	20000317
	EP 1041121	B1	20030827		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AT 248206	E	20030915	AT 2000-810226	20000317
	ES 2204484	T3	20040501	ES 2000-810226	20000317
PRAI	EP 1999-810250	A	19990322		

OS MARPAT 133:297654
AB Title reactive dyes have a structure I where Me is Cu or Ni, R1 is (substituted) C1-C4 alkyl, X1 is H, OH, alkoxy, etc., u is 1-4, q is 0 or 1, A is a substituent containing pyridine ring or pyridine carboxamide .
IT **300407-42-5P 300407-86-7P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**dye** having good combine stability with fibers)
RN 300407-42-5 HCAPLUS
CN Cuprate(5-), [2-[[[[3-[[4-[[2-[3-(aminocarbonyl)-5-[[5-[[4-chloro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2,4-disulfophenyl]azo]-6-hydroxy-4-methyl-2-oxo-1(2H)-pyridinyl]ethyl]amino]-6-fluoro-1,3,5-triazin-2-yl]amino]-2-(hydroxy-κO)-5-sulfophenyl]azo-κN2]phenylmethyl]azo-κN1]-4-sulfobenzoato(7-)-κO]-, pentahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A

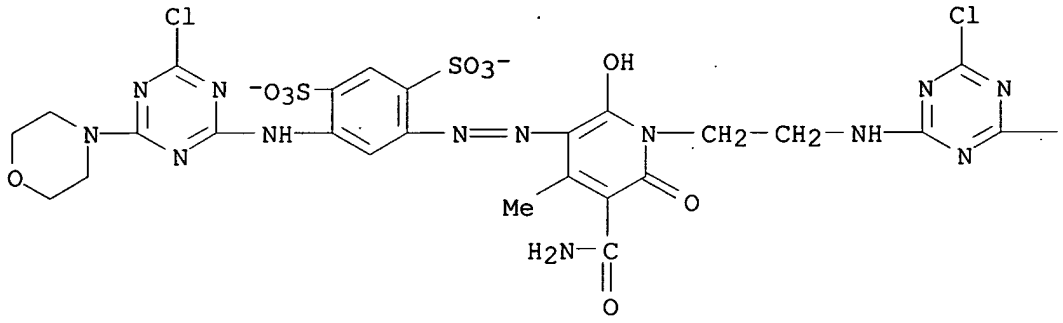


PAGE 1-B

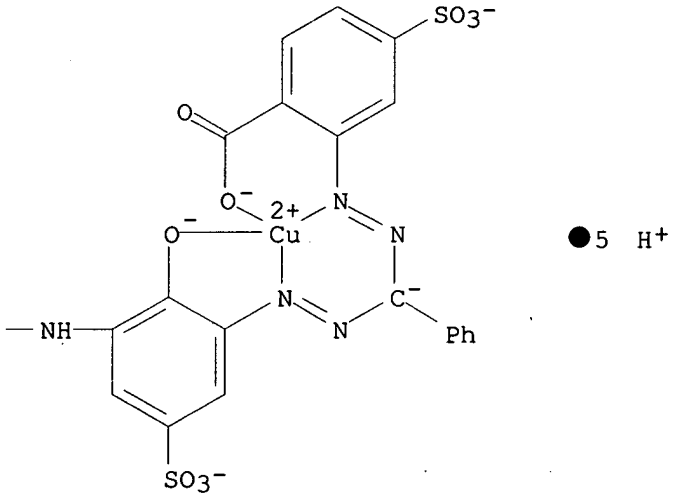


RN 300407-86-7 HCAPLUS
CN Cuprate(5-), [2-[[[[3-[[4-[[2-[3-(aminocarbonyl)-5-[[5-[[4-chloro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2,4-disulfophenyl]azo]-6-hydroxy-4-methyl-2-oxo-1(2H)-pyridinyl]ethyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]-2-(hydroxy-κO)-5-sulfophenyl]azo-κN2]phenylmethyl]azo-κN1]-4-sulfobenzoato(7-)-κO]-, pentahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A

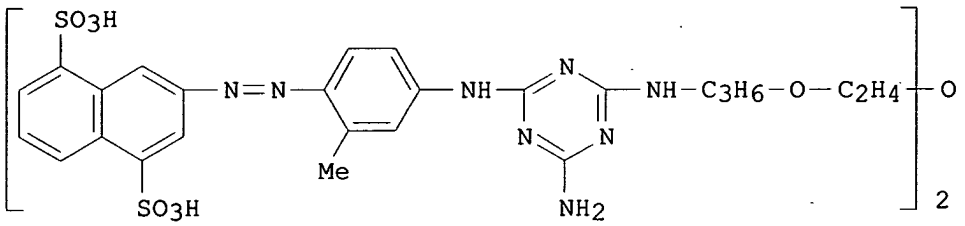


PAGE 1-B

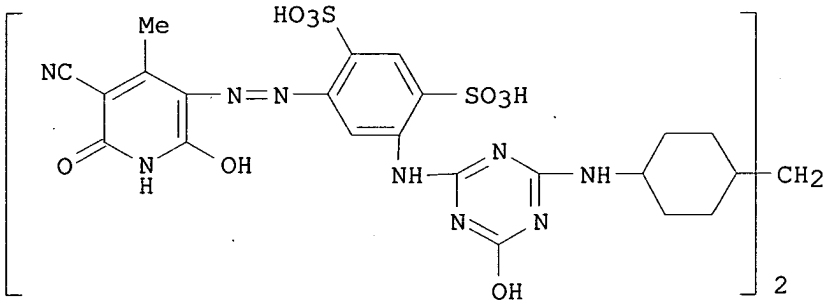


L16 ANSWER 4 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:356371 HCAPLUS
DN 133:5975
TI Jet printing inks containing azo dyes
IN Nishimura, Toru; Sano, Hideo; Yamada, Masahiro
PA Mitsubishi Chemical Industries Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000144003	A2	20000526	JP 1998-314399	19981105
PRAI	JP 1998-314399		19981105		
OS	MARPAT 133:5975				
GI					



I



II

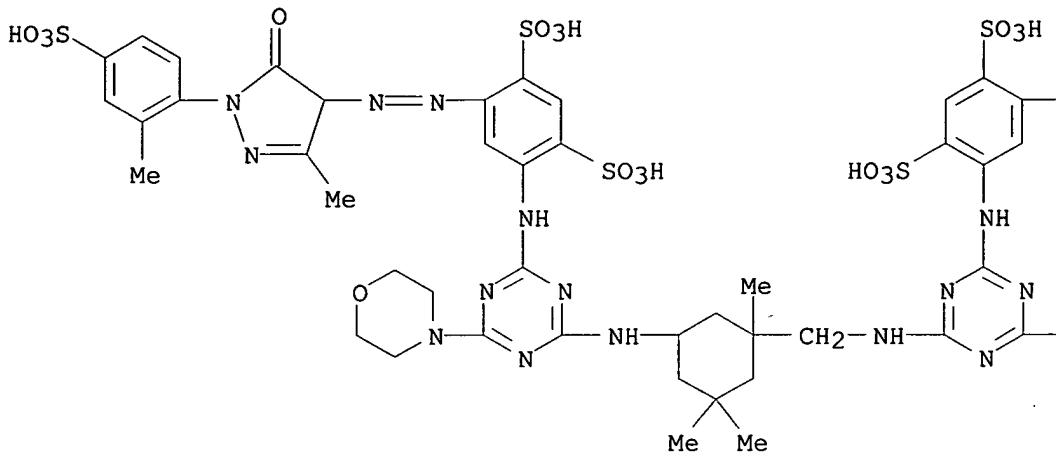
AB Yellow inks contain I, II, and similar compds. Thus, an ink contained I 3, diethylene glycol 10, iso-PrOH 3, water to 100 parts, and aqueous NH3 to pH 9.

IT **270078-32-5**
RL: TEM (Technical or engineered material use); USES (Uses)
(yellow jet printing inks containing azo **dyes**)

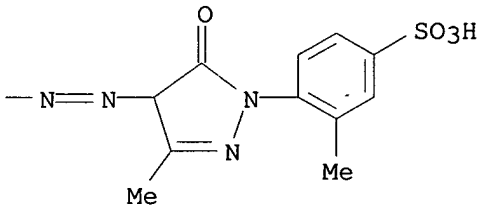
RN 270078-32-5 HCAPLUS

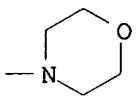
CN 1,3-Benzenedisulfonic acid, 4-[[4,5-dihydro-3-methyl-1-(2-methyl-4-sulfophenyl)-5-oxo-1H-pyrazol-4-yl]azo]-6-[[4-[[3-[[[4-[[5-[[4,5-dihydro-3-methyl-1-(2-methyl-4-sulfophenyl)-5-oxo-1H-pyrazol-4-yl]azo]-2,4-disulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]methyl]-3,5,5-trimethylcyclohexyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B





L16 ANSWER 5 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:659461 HCAPLUS
DN 131:287741
TI Reactive dye compounds
IN Brock, Earl David; Lewis, David Malcolm; Yousaf, Taher Iqbal
PA The Procter & Gamble Company, USA
SO PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9951683	A1	19991014	WO 1998-US6541	19980402

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,

UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU	9869474	A1	19991025	AU 1998-69474	19980402
WO	9951686	A1	19991014	WO 1999-US7294	19990401

W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LK, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU	9934665	A1	19991025	AU 1999-34665	19990401
BR	9909363	A	20001219	BR 1999-9363	19990401
BR	9909367	A	20001219	BR 1999-9367	19990401
EP	1066346	A1	20010110	EP 1999-916317	19990401

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

JP	2003524664	T2	20030819	JP 2000-542402	19990401
US	6518407	B1	20030211	US 2001-647580	20010213

PRAI WO 1998-US6541 A 19980402
WO 1999-US7293 W 19990401
WO 1999-US7294 W 19990401

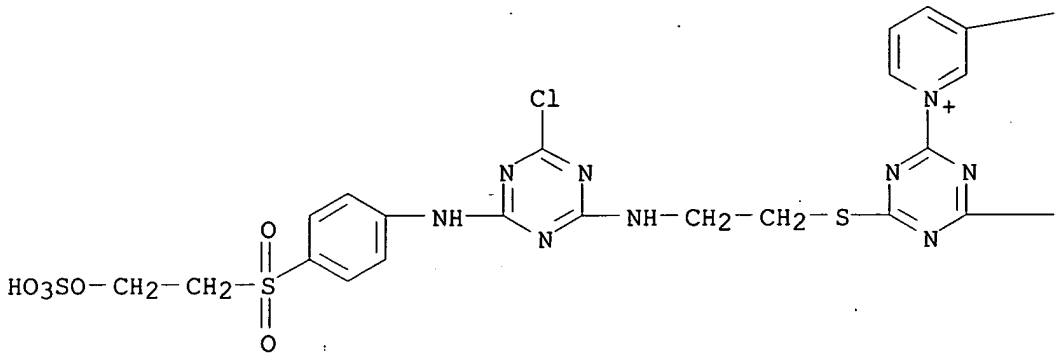
AB Reactive dyes are disclosed having a fixation value on cellulosic substrates of ≥95% as measured by the Fixation Value Tech. Test Method (at 2:1 standard depth). In addition, the dyes have high exhaustion values and high efficiency values and show significant improvements in terms of reducing spent dye in effluent, increasing dye affinity to the substrate, increasing the dye-substrate covalent bonding, increasing the ability to dye substrates at room temperature, decreasing the amount of dye that is removed during the post dyeing "soaping off process" and therefore simplifying the post dyeing "soaping off process" traditionally associated with dyeing cotton with fiber reactive dyes, and reduction of staining of adjacent white fabrics. The prepared dyes, which have a nitrogen heterocycle substituted with a quaternized nitrogen derivative, provide more intense dyeings and require less levels of salt for dyeing cotton substrates. In an example, Procion Red MX-8B is treated with mercaptoacetic acid and then isonicotinic acid to give a dye suitable for cotton, wool, or nylon.

IT **246255-74-3P 246255-76-5P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**dye**; production of quaternary ammonium reactive **dye** derivs.)

RN 246255-74-3 HCAPLUS

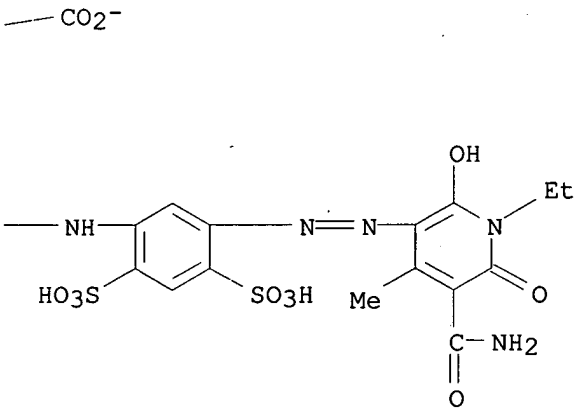
CN Pyridinium, 1-[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-[[2-[[4-chloro-6-[[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]amino]ethyl]thio]-1,3,5-triazin-2-yl]-3-carboxy-, inner salt, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



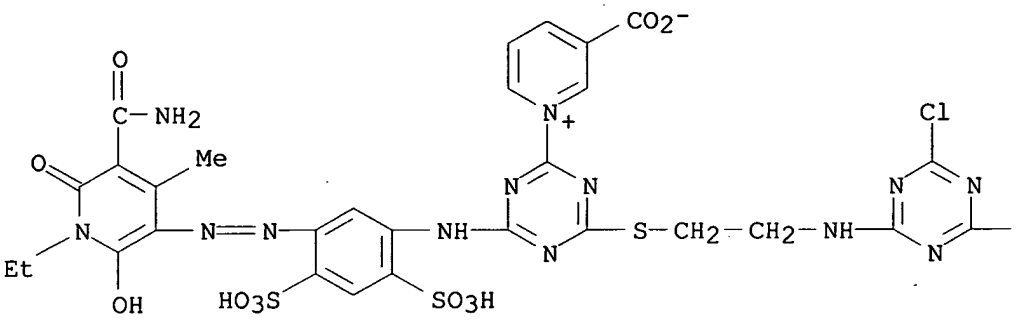
●2 Na

PAGE 1-B



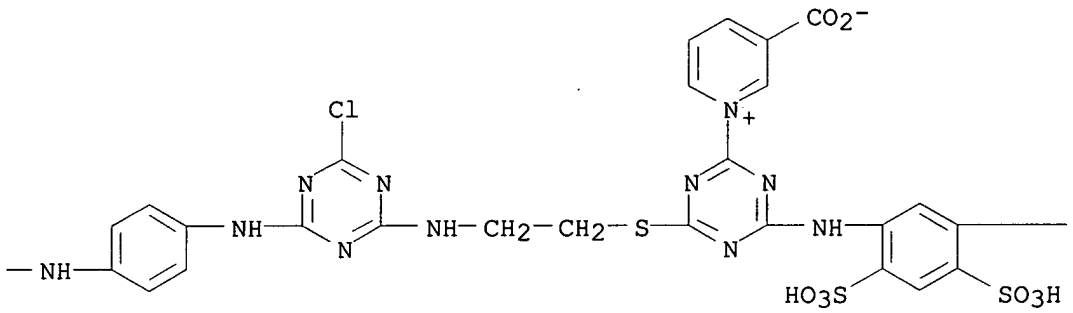
RN 246255-76-5 HCAPLUS
CN Pyridinium, 1,1'-[1,4-phenylenebis[imino(6-chloro-1,3,5-triazine-4,2-diyl)imino-2,1-ethanediylthio[6-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, bis(inner salt), tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

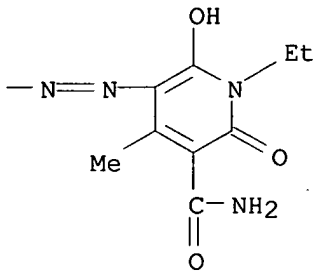


●4 Na

PAGE 1-B



PAGE 1-C

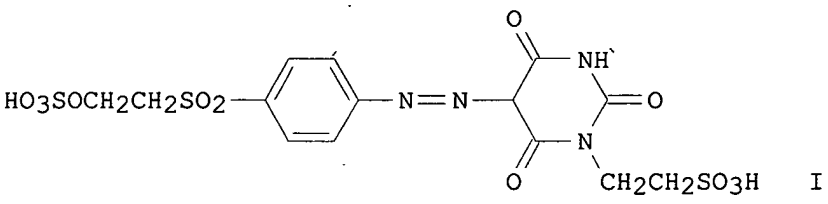


RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 6 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:654981 HCAPLUS
DN 123:35264
TI Barbituric acid derivatives as reactive azo dyes and process and intermediates for their preparation
IN Ehrenberg, Stefan; Engel, Aloys; Henk, Hermann
PA Bayer A.-G., Germany
SO Ger. Offen., 46 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4329421	A1	19950302	DE 1993-4329421	19930901
	EP 641838	A1	19950308	EP 1994-112968	19940819
	EP 641838	B1	19991110		
	R: CH, DE, FR, GB, LI				
	US 5502174	A	19960326	US 1994-296308	19940825
	JP 07102180	A2	19950418	JP 1994-229048	19940831
PRAI	DE 1993-4329421	A	19930901		

OS MARPAT 123:35264
GI



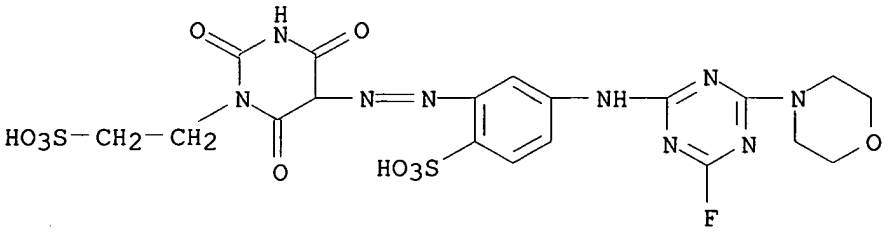
AB The dyes, with an azo linkage to the 5-position of a barbituric acid ring, show improved solubility and properties facilitating their synthesis. Thus,

4-HO3SOCH2CH2SO2C6H4NH2 was diazotized and coupled with 1-(2-sulfoethyl)barbituric acid at pH 5-7 to give I, a greenish yellow dye for cotton.

IT **164463-39-2P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(yellow; preparation of reactive azo **dyes** for cotton)

RN 164463-39-2 HCAPLUS

CN 1(2H)-Pyrimidineethanesulfonic acid, 5-[[5-[[4-fluoro-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]azo]tetrahydro-2,4,6-trioxo- (9CI) (CA INDEX NAME)



L16 ANSWER 7 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:109404 HCAPLUS

DN 120:109404

TI Dyeing of cellulosic fibers by exhaust method

IN Imada, Kunihiko; Ootake, Katsumasa; Omura, Takashi; Takeshita, Akira

PA Sumitomo Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05209375	A2	19930820	JP 1992-292635	19921030
	JP 2572335	B2	19970116		
PRAI	JP 1992-292635		19921030		

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The fibers are treated with dyes containing hydrophilic groups and ≥1 triazine derivative group I [R = pyridine derivs. (not nicotinic acid and its alkali metal salts)] at a neutral to weakly acidic pH and 100-140°. A cotton knit was treated with an aqueous solution containing II 4, Na2SO4 100, NaH2PO4 4, and Na2HPO4 1 part at 130° and pH 7 for 60 min and soaped to give a reddish-yellow fabric with good dye fastness.

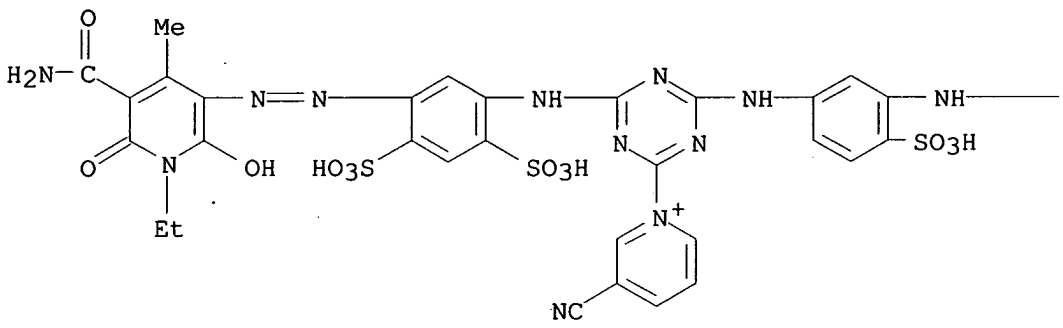
IT **100846-39-7**
RL: USES (Uses)
(exhaustion **dyeing** of cellulose fibers by)

RN 100846-39-7 HCAPLUS

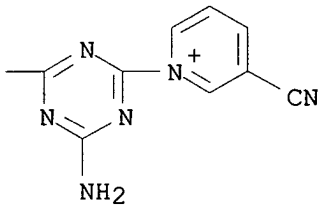
CN Pyridinium, 1-[4-amino-6-[[5-[[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-

6-(3-cyanopyridinio)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]-3-cyano- (9CI) (CA INDEX NAME)

PAGE 1-A



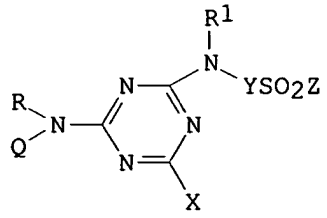
PAGE 1-B



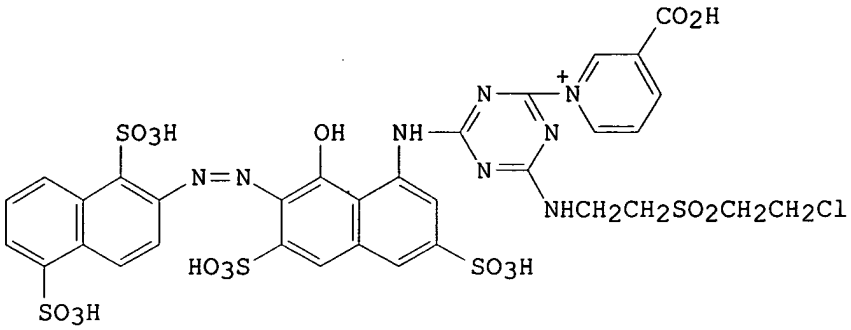
L16 ANSWER 8 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:108303 HCAPLUS
DN 116:108303
TI Triazine compounds and their use in dyeing and printing fibrous materials
IN Akahori, Kingo; Kashiwane, Yutaka; Yoshikawa, Sadanobu
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03247664	A2	19911105	JP 1990-43932	19900223
	JP 2841638	B2	19981224		
PRAI	JP 1990-43932		19900223		

OS MARPAT 116:108303
GI



I



II

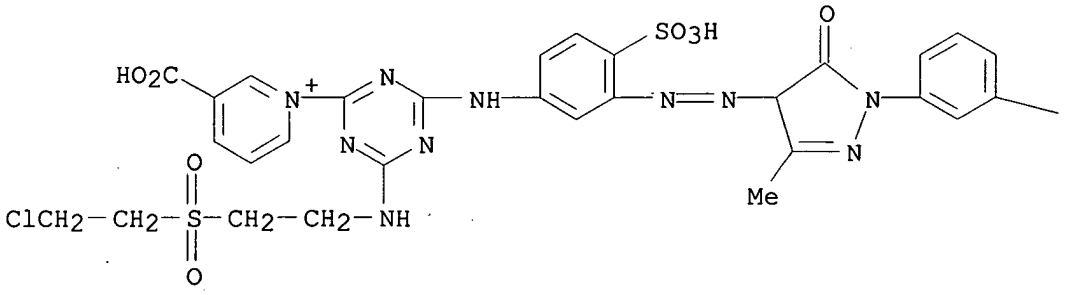
AB The compds., providing cotton dyeings and prints with good colorfastness and dye buildup, have the general formula I [Q = sulfo group-containing organic dye residue; R = H, (un)substituted alkyl; R1 = H, (un)substituted alkyl, -YSO2Z1; X = (un)substituted pyridinio; Y = W(R2)CH2, (CH2)nO(CH2)m, W1N(R3)W2; W = C1-6 alkylene; W1, W2 = C2-6 alkylene; R2 = H, Cl, Br, F, OH, OSO3H, CN, C1-4 alkylcarbonyloxy, C1-5 alkoxycarbonyl, CO2H, CONH2; R3 = H, C1-6 alkyl; m, n = 1-6; Z, Z1 = CH:CH2 or precursor]. Cyanuric chloride was condensed with H acid and ClCH2CH2SO2CH2CH2NH2 in an aqueous medium, then the product was coupled with diazotized 2-aminonaphthalene-1,5-disulfonic acid, followed by condensation with nicotinic acid and salting to give a monoazo compound of free-acid form II, λmax 540 nm, fast red on cotton.

IT **139261-26-0P**
RL: PREP (Preparation)
(manufacture of, as **dye** for cotton)

RN 139261-26-0 HCAPLUS

CN Pyridinium, 3-carboxy-1-[4-[[2-[(2-chloroethyl)sulfonyl]ethyl]amino]-6-[[3-[[4,5-dihydro-3-methyl-5-oxo-1-(3-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A



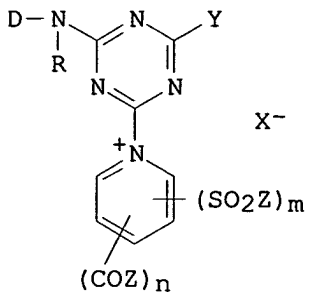
PAGE 1-B

—SO_3H

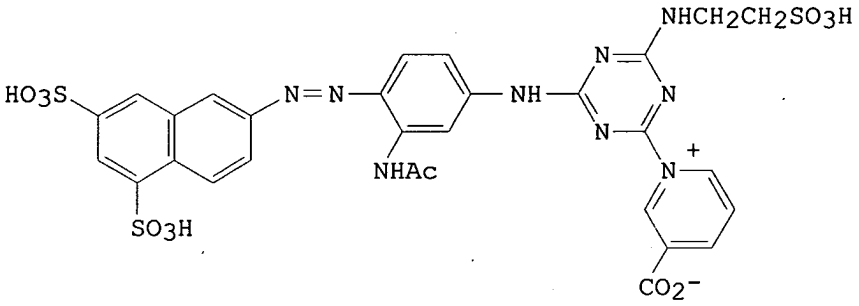
L16 ANSWER 9 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:585366 HCAPLUS
DN 115:185366
TI Manufacture of ionic reactive dyes containing a pyridinium group and dyebaths containing them
IN Michna, Martin; Hoppe, Manfred; Herd, Karl Josef; Henk, Hermann; Stoehr, Frank Michael
PA Bayer A.-G., Germany
SO Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 418623	A1	19910327	EP 1990-116819	19900901
	R: CH, DE, FR, GB, LI				
	DE 3930996	A1	19910328	DE 1989-3930996	19890916
PRAI	DE 1989-3930996		19890916		

OS MARPAT 115:185366
GI



I



II

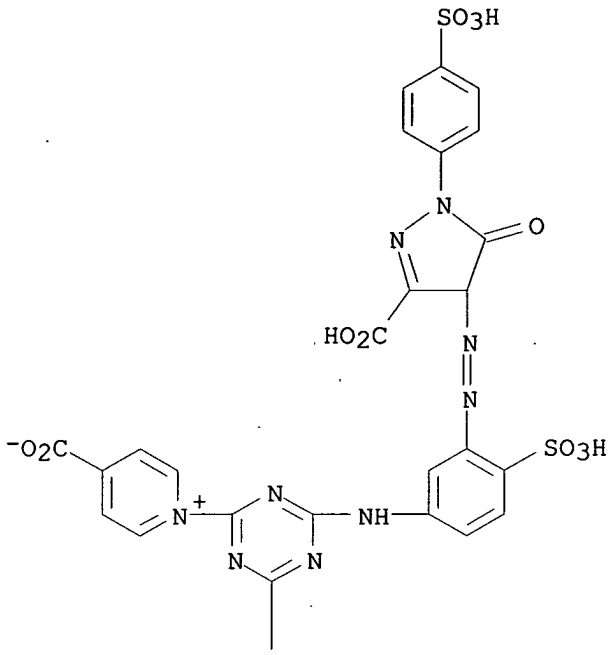
AB Reactive dyes I [D = chromophoric residue; R = H, C1-4 alkyl; X- = anion; Y = nonfiber-reactive substituent; Z = OH, OR1, NR2R3, OM; M = alkali metal, alkaline earth metal; R1 = (un)substituted C1-4 alkyl; R2, R3 = H, (un)substituted C1-4 alkyl, or NR2R3 is a 5- or 6-membered heterocyclic ring; m, n = 0-2; m + n ≤ 2] are prepared by the reaction of pyridine derivs. with fluorotriazinylamino group-substituted dyes in the presence of acid-binding agents. Thus, 2-amino-5,7-naphthalenedisulfonic acid was diazotized and coupled with N-(3-aminophenyl)acetamide, the monoazo intermediate condensed with cyanuric fluoride in the presence of Li2CO3, the monocondensate condensed with MeNHCH2CH2SO3H, and the (fluorotriazinyl)amino group-substituted azo intermediate treated with nicotinic acid in the presence of NaOH, producing a II solution, which was concentrated by membrane permeation, diluted with H2O, and buffered, producing a solution which could be directly used for dyeing or printing of textiles (no color data given).

IT **135825-05-7P**
RL: PREP (Preparation)
(manufacture of, as reactive **dye**)

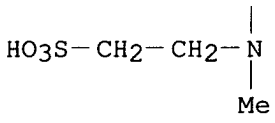
RN 135825-05-7 HCAPLUS

CN Pyridinium, 4-carboxy-1-[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[methyl(2-sulfoethyl)amino]-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A



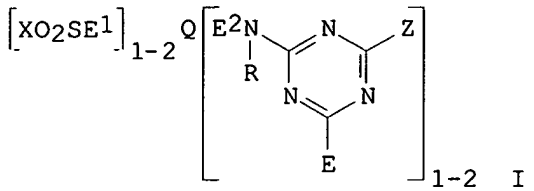
PAGE 2-A



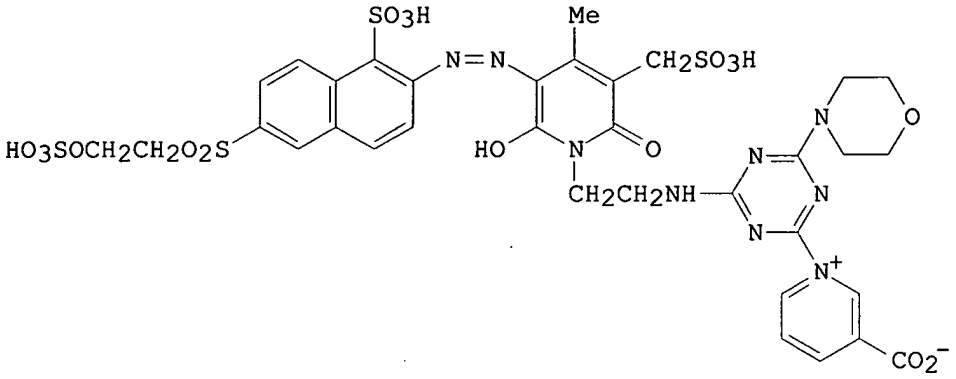
L16 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:494411 HCAPLUS
DN 115:94411
TI Bifunctional reactive dyes containing pyridinium and triazinylamino groups
IN Hoppe, Manfred; Herd, Karl Josef; Henk, Hermann; Stoehr, Frank Michael
PA Bayer A.-G., Germany
SO Eur. Pat. Appl., 93 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 418664	A1	19910327	EP 1990-117167	19900906
	EP 418664	B1	19940622		
	R: CH, DE, FR, GB, LI				
	DE 3931140	A1	19910328	DE 1989-3931140	19890919
PRAI	DE 1989-3931140		19890919		

OS MARPAT 115:94411
GI



I



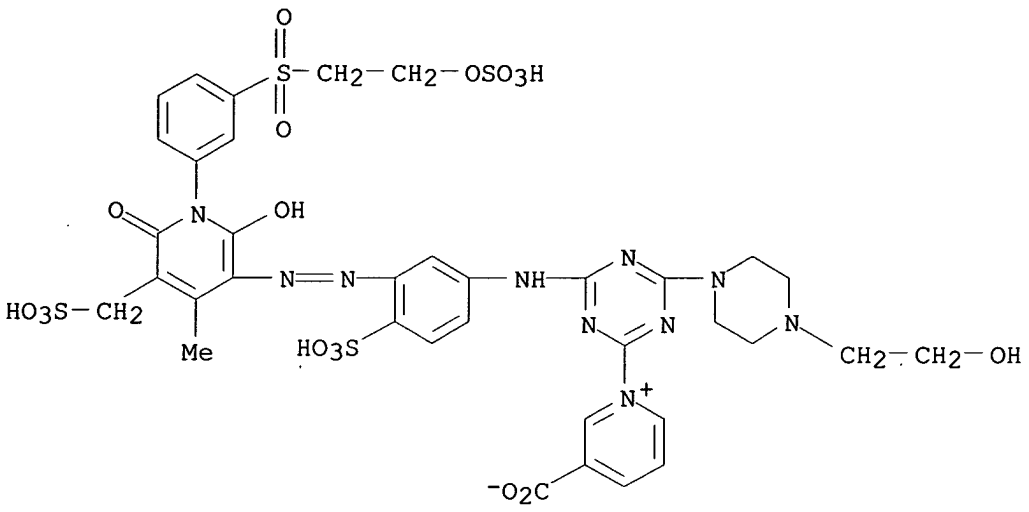
II

AB Reactive dyes I [E = (un)substituted pyridinium residue; Z = N-containing 5- or 6-membered heterocyclic residue; E1, E2 = direct bond, bridging group; Q = chromophoric residue; R = (un)substituted C1-6 alkyl, H; X = CH:CH2 or precursor], useful for dyeing or printing of hydroxyl and/or amide group-containing fabrics, were prepared Thus, 1-(2-aminoethyl)-6-hydroxy-4-methyl-3-(sulfomethyl)-2-pyridone was condensed with cyanuric chloride, the condensate condensed with morpholine and nicotinic acid, and the resulting intermediate coupled with diazotized 2-amino-6-(2-sulfatoethylsulfonyl)-1-naphthalenesulfonic acid, forming II, which dyed cotton fabrics in strong greenish-yellow shades.

IT **135097-94-8P**
RL: PREP (Preparation)
(manufacture of, as reactive yellow **dye** for cotton)

RN 135097-94-8 HCAPLUS

CN Pyridinium, 3-carboxy-1-[4-[[3-[[1,6-dihydro-2-hydroxy-4-methyl-6-oxo-5-(sulfomethyl)-1-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]-3-pyridinyl]azo]-4-sulfophenyl]amino]-6-[4-(2-hydroxyethyl)-1-piperazinyl]-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)



L16 ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:431103 HCAPLUS
DN 115:31103
TI Polyfunctional reactive dyes
IN Herd, Karl Josef; Henk, Hermann; Stoehr, Frank Michael
PA Bayer A.-G., Germany
SO Eur. Pat. Appl., 105 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 395951	A1	19901107	EP 1990-107503	19900420
	EP 395951	B1	19940824		
	R: CH, DE, FR, GB, LI				
	DE 3914628	A1	19901115	DE 1989-3914628	19890503
	JP 02308864	A2	19901221	JP 1990-115335	19900502
	US 5274083	A	19931228	US 1991-724443	19910702
PRAI	DE 1989-3914628		19890503		
	US 1990-511129		19900419		

OS MARPAT 115:31103
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title dyes I [A = direct bond, divalent (cyclo)aliphatic bridging group, divalent aromatic aliphatic bridging group; D1, D2 = direct bond, divalent bridging group; G = chromophoric residue; R,R1,R2 = H, (un)substituted C1-4 alkyl; X = CH:CH2, CH2CH2Y; Y = alkyli-cleavable substituent; Y1 = F, Cl, Br; Z = fiber-reactive residue], useful for dyeing or printing hydroxyl or amide group-containing fabrics, are prepared Thus, 1-aminoethyl-3-sulfomethyl-4-methyl-6-hydroxy-2-pyridone was condensed with cyanuric chloride, the condensate condensed with ethylenediamine,

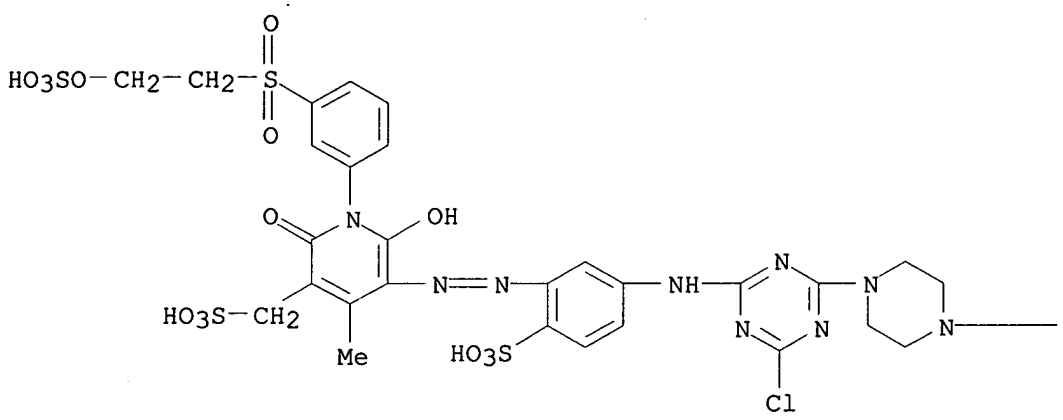
5-chloro-2,4,6-trifluoropyrimidine added, and the intermediate coupled with diazotized 2-amino-6-(β-sulfatoethylsulfonyl)-1-naphthalenesulfonic acid forming II which dyed cotton fabrics fast greenish yellow shades.

IT **134559-58-3P**
RL: PREP (Preparation)
(manufacture of, as yellow reactive **dye**)

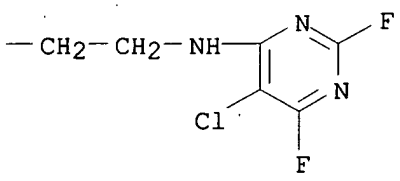
RN 134559-58-3 HCAPLUS

CN 3-Pyridinemethanesulfonic acid, 5-[[5-[[4-chloro-6-[4-[2-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]ethyl]-1-piperazinyl]-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]azo]-1,2-dihydro-6-hydroxy-4-methyl-2-oxo-1-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L16 ANSWER 12 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:230678 HCAPLUS
DN 114:230678

TI Manufacture of reactive azo dyes
IN Kojima, Masayoshi; Shirasaki, Toshitaka
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03007769	A2	19910114	JP 1989-142123	19890606
	JP 2534909	B2	19960918		
PRAI	JP 1989-142123		19890606		

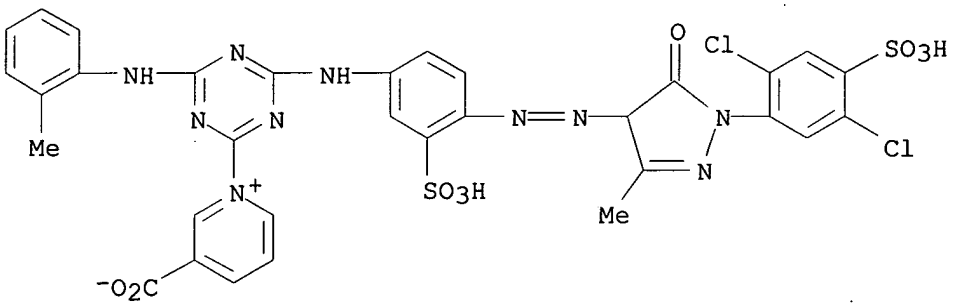
OS MARPAT 114:230678
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

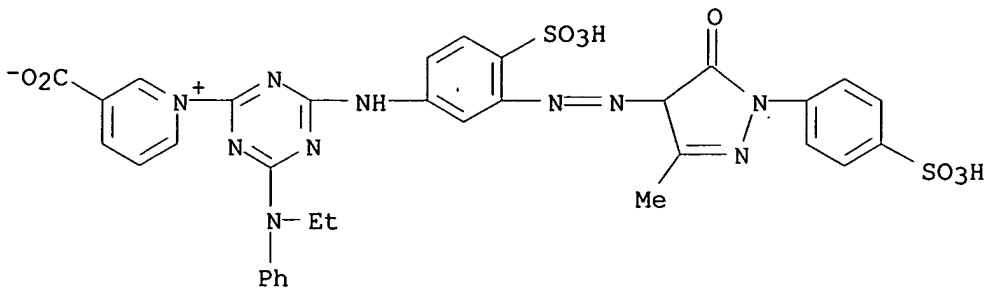
AB I or II (R = H, sulfo, Me; R1 = aliphatic, aromatic amine residue; R2 = H, Me, Et; R3 = H, Me) is quaternized with III (R4 = H, amino; R4CO at the 3- or 4-position), and the resulting pyridinium salts are subjected to diazo coupling to obtain reactive azo dyes IV and V (D1 = coupling component residue; D2 = diazo component residue). In this process, the quaternization is carried out during a short reaction time at a low temperature Thus, 4-hydroxy-7-amino-2-naphthalenesulfonic acid was condensed with cyanuric chloride, 4-chloroaniline-3-sulfonic acid, and nicotinic acid, and the pyridinium salt intermediate was coupled with diazotized 4-(methoxy)aniline-2-sulfonic acid and salted to give VI, bright scarlet on cotton.

IT **133971-52-5P 133971-56-9P 133988-68-8P**
RL: PREP (Preparation)
(manufacture of, as **dyes** for cotton)

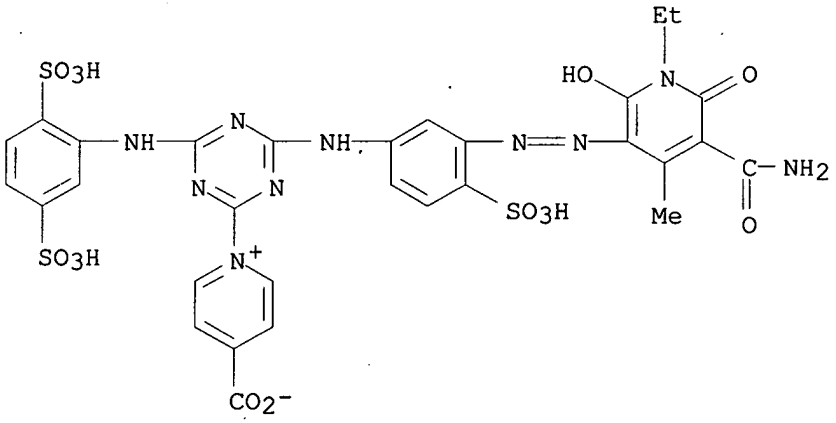
RN 133971-52-5 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[4-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-3-sulfophenyl]amino]-6-[(2-methylphenyl)amino]-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)



RN 133971-56-9 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[3-[[4,5-dihydro-3-methyl-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(ethylphenylamino)-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)



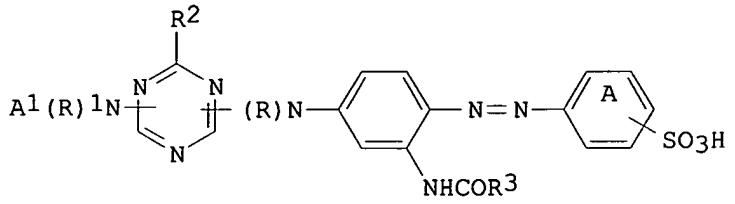
RN 133988-68-8 HCAPLUS
CN Pyridinium, 1-[4-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]-6-[(2,5-disulfophenyl)amino]-1,3,5-triazin-2-yl]-4-carboxy-, inner salt (9CI) (CA INDEX NAME)



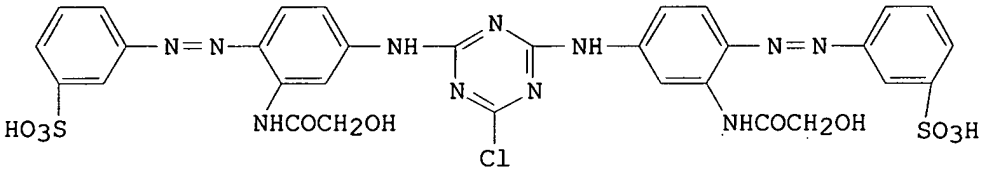
L16 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1990:236896 HCAPLUS
DN 112:236896
TI Direct azo dyes, and their preparation and use
IN Schaulin, Rudolf
PA Ciba-Geigy A.-G., Switz.
SO Eur. Pat. Appl., 42 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 348344	A1	19891227	EP 1989-810443	19890613
	EP 348344	B1	19931229		
	R: BE, CH, DE, ES, FR, GB, IT, LI				
	ES 2062091	T3	19941216	ES 1989-810443	19890613
	US 4997919	A	19910305	US 1989-370203	19890619
	KR 9703674	B1	19970321	KR 1989-8456	19890620
	BR 8903006	A	19900206	BR 1989-3006	19890621

JP 02051565 A2 19900221 JP 1989-159391 19890621
PRAI CH 1988-2381 A 19880621
OS MARPAT 112:236896
GI



I



II

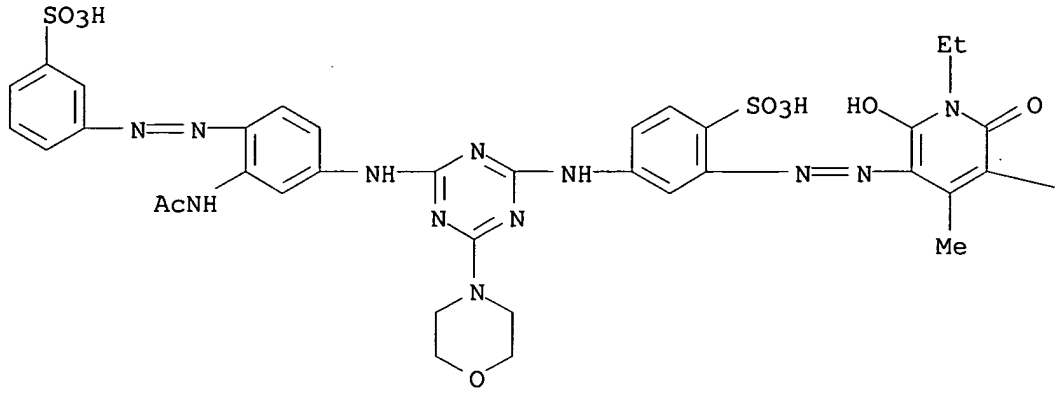
AB The title dyes I [A' = 3,4-R3CONH(HO3SC6H4N:N)C6H4, monoazo or polyazo dye residues; R, R1 = H, (un)substituted C1-4 alkyl; R2 = substituent; R3 = (un)substituted C1-4 alkyl; ring A may be further substituted], useful for dyeing or printing of N-containing and cellulosic materials, are prepared The I are useful, in conjunction with disperse dyes, for sep. dyeing cotton and polyester fibers in their blends from a single bath. Thus, 3-H2NC6H4SO3H was diazotized, coupled with 3-HOCH2CONHC6H4NH2, and the intermediate condensed 2:1 with cyanuric chloride, forming II, λmax 382 nm, which dyed cotton, paper, and leather fast greenish yellow shades.

IT **127436-56-0P 127436-60-6P**
RL: PREP (Preparation)
(manufacture of, as yellow direct **dye** for cotton)

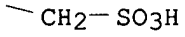
RN 127436-56-0 HCAPLUS

CN 3-Pyridinemethanesulfonic acid, 5-[[5-[[4-[[3-(acetylamino)-4-[(3-sulfophenyl)azo]phenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]azo]-1-ethyl-1,2-dihydro-6-hydroxy-4-methyl-2-oxo- (9CI) (CA INDEX NAME)

PAGE 1-A

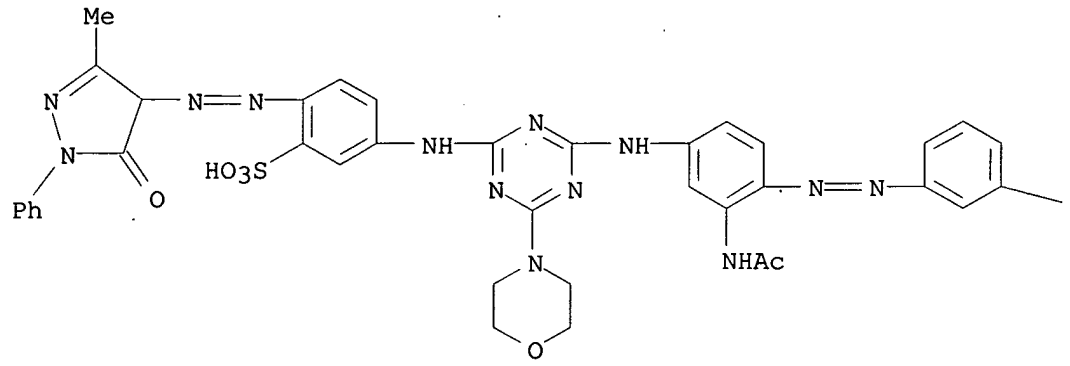


PAGE 1-B



RN 127436-60-6 HCAPLUS
CN Benzenesulfonic acid, 5-[[4-[[3-(acetylamino)-4-[(3-sulfophenyl)azo]phenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

L16 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:530803 HCAPLUS
DN 109:130803
TI Reactive disazo dyes
IN Schlaefer, Ludwig; Springer, Hartmut; Haehnle, Reinhard
PA Hoechst A.-G., Fed. Rep. Ger.
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3637337	A1	19880511	DE 1986-3637337	19861103
	US 4861344	A	19890829	US 1987-115435	19871030
	EP 266714	A1	19880511	EP 1987-116058	19871031
	EP 266714	B1	19900919		
	R: BE, CH, DE, ES, FR, GB, IT, LI				
	JP 63122761	A2	19880526	JP 1987-275917	19871102
	JP 07098908	B4	19951025		
	US 4898933	A	19900206	US 1989-348276	19890505
PRAI	DE 1986-3637337		19861103		
	US 1987-115435		19871030		

OS MARPAT 109:130803
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I [A = (un)substituted phenylene, 4-C6H3(R)W(R)C6H3-4; R = H, NO2, SO3H, CO2H, Me, Et, MeO, EtO; W = direct bond, CH:CH, NHCONH; B = 3-carboxypyridinium, 3-carbamoylpyridinium; Q = fiber-reactive group-containing coupling component residue; M = H, alkali metal; n = 0, 1], useful for dyeing carbamoyl and/or hydroxyl group-containing materials, especially cellulose fibers, are prepared Cyanuric chloride was condensed with 1,3-diamino-4-benzenesulfonic acid, the monocondensate condensed with 1,4-diaminobenzene, the dye condensate tetrazotized and coupled with 3-methyl-1-[4-(β-sulfatoethylsulfonyl)phenyl]-5-pyrazolone, nicotinic acid added, and the mixture refluxed for 2 h, forming II, λmax 348 nm, which dyed cotton in a fast yellow shade.

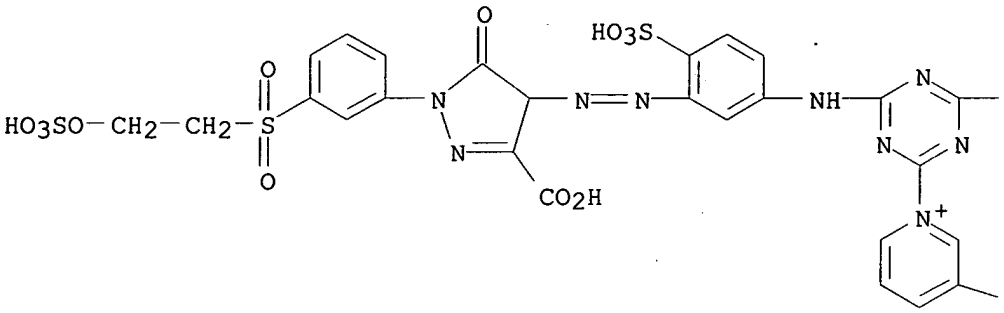
IT **116390-91-1P 116390-92-2P 116414-03-0P**
116414-07-4P 116414-08-5P

RL: PREP (Preparation)
(manufacture of, as reactive yellow **dye**)

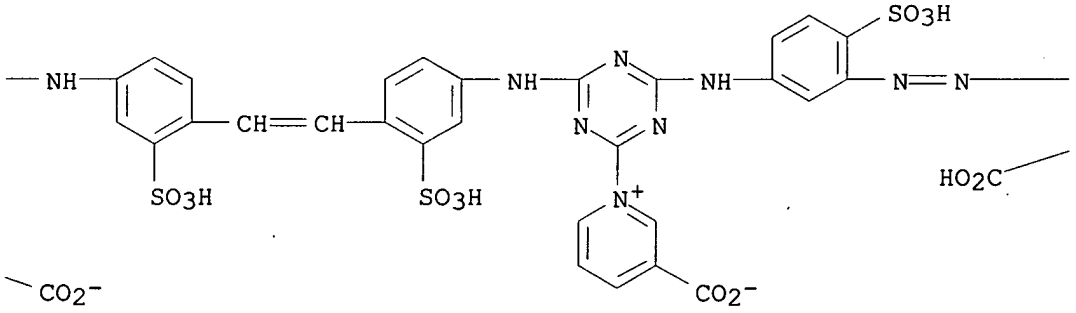
RN 116390-91-1 HCAPLUS

CN Pyridinium, 1,1'-[1,2-ethenediylbis[(3-sulfo-4,1-phenylene)imino[6-[[4-[[3-carboxy-4,5-dihydro-5-oxo-1-[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, bis(inner salt) (9CI) (CA INDEX NAME)

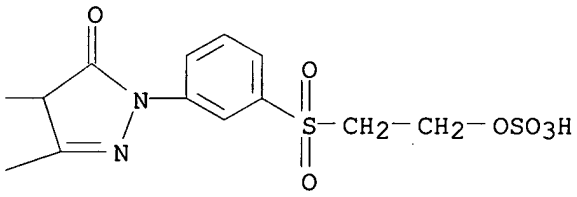
PAGE 1-A



PAGE 1-B



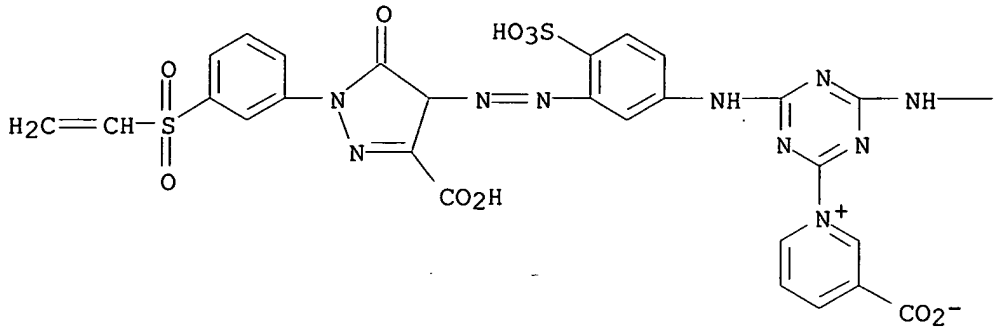
PAGE 1-C



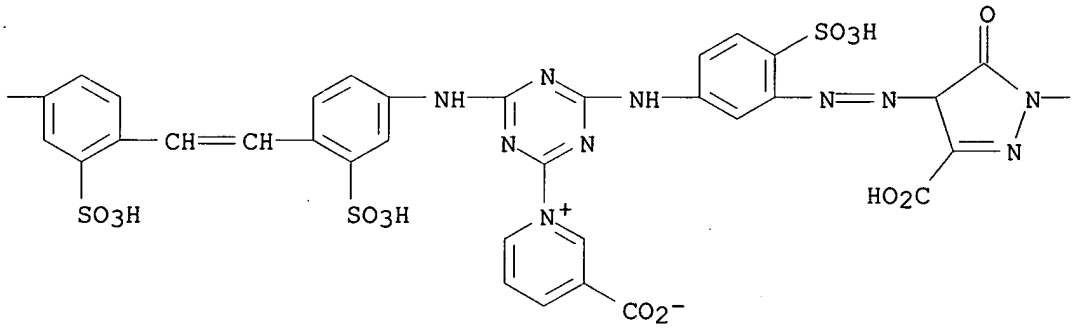
RN 116390-92-2 HCAPLUS

CN Pyridinium, 1,1'-[1,2-ethenediylbis[(3-sulfo-4,1-phenylene)imino[6-[[3-[[3-carboxy-1-[3-(ethenylsulfonyl)phenyl]-4,5-dihydro-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, bis(inner salt) (9CI) (CA INDEX NAME)

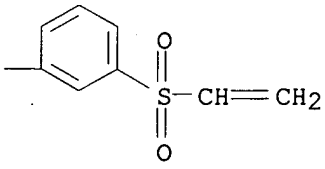
PAGE 1-A



PAGE 1-B

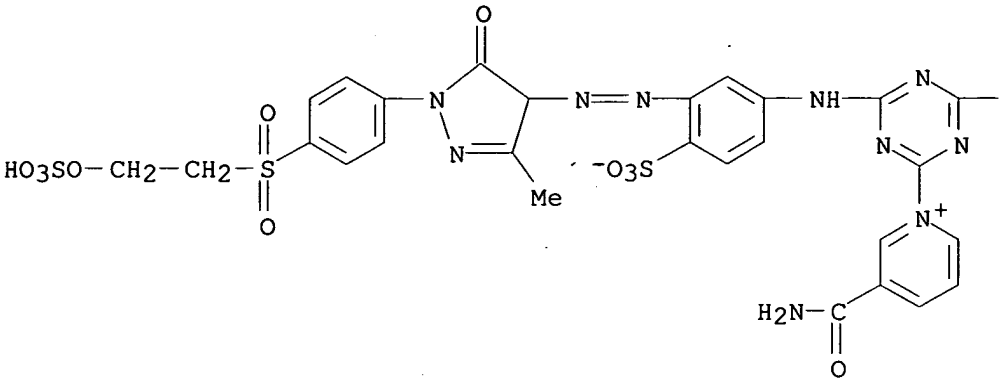


PAGE 1-C

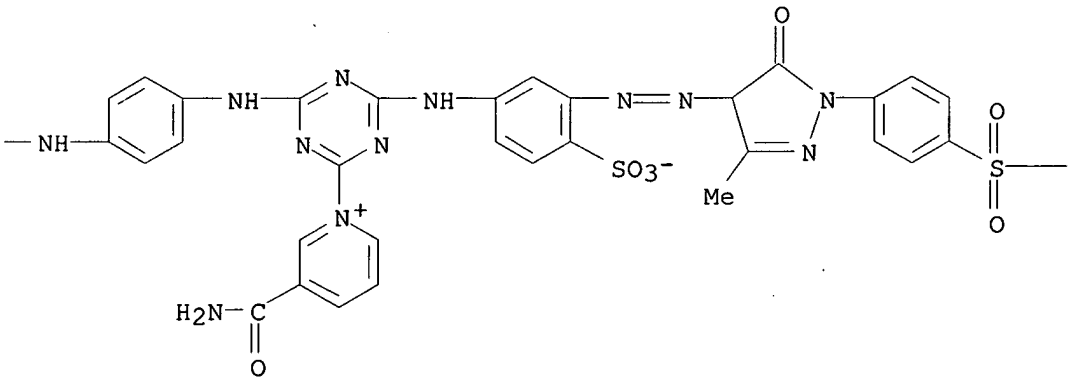


RN 116414-03-0 HCAPLUS
CN Pyridinium, 1,1'-[1,4-phenylenebis[imino[6-[[3-[[4,5-dihydro-3-methyl-5-oxo-1-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-(aminocarbonyl)-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

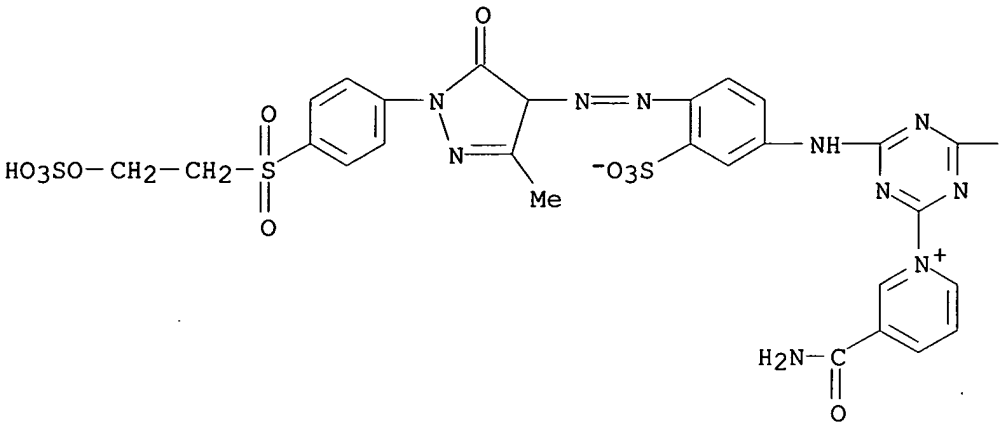


PAGE 1-C

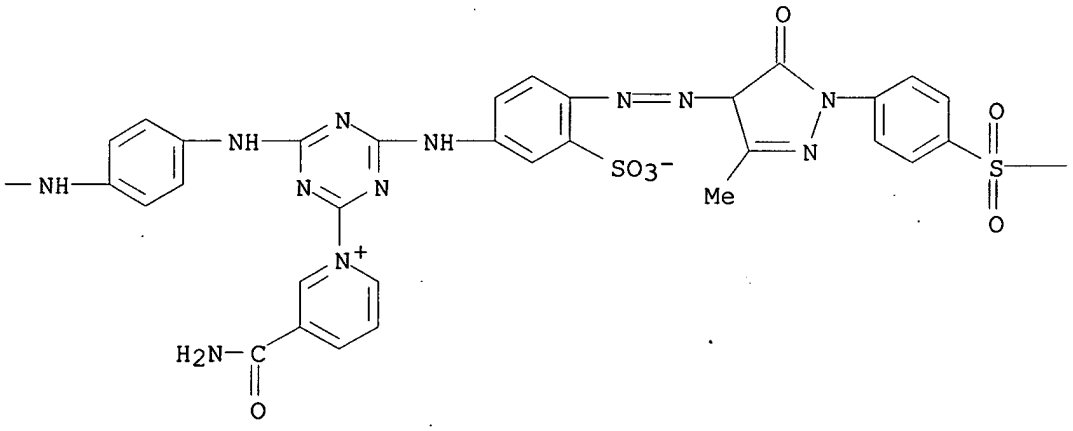
— CH_2— CH_2— OSO_3H

RN 116414-07-4 HCAPLUS
CN Pyridinium, 1,1'-[1,4-phenylenebis[imino[6-[[4-[[4,5-dihydro-3-methyl-5-oxo-1-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]-1H-pyrazol-4-yl]azo]-3-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-(aminocarbonyl)-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

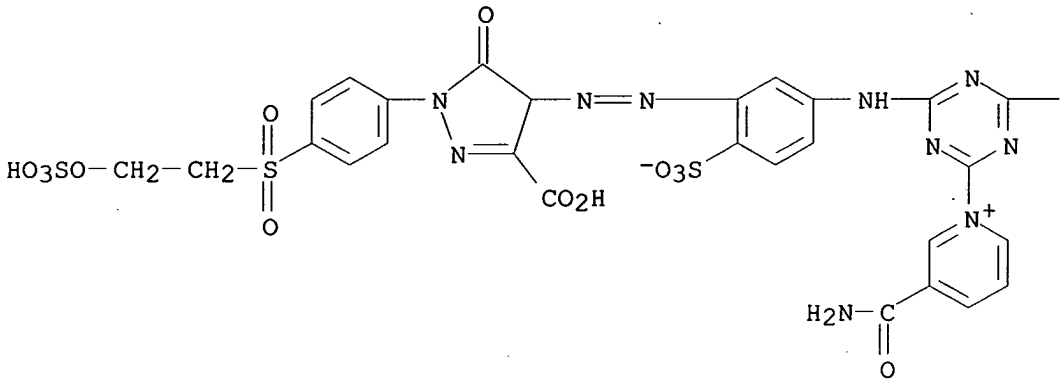


PAGE 1-C

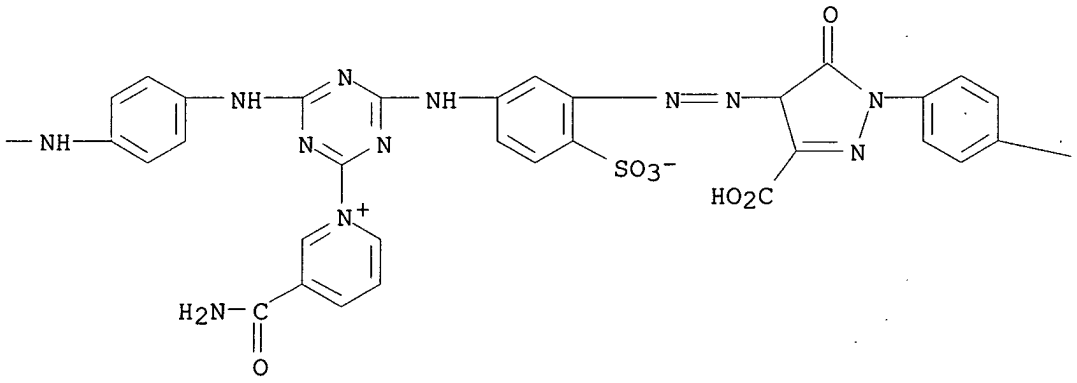
— CH_2 — CH_2 — OSO_3H

RN 116414-08-5 HCAPLUS
CN Pyridinium, 1,1'-[1,4-phenylenebis[imino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-(aminocarbonyl)-, bis(inner salt) (9CI) (CA INDEX NAME)

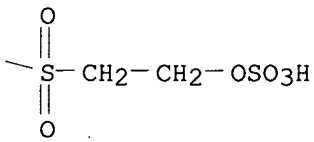
PAGE 1-A



PAGE 1-B



PAGE 1-C



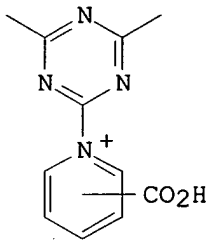
L16 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:600383 HCAPLUS
DN 107:200383
TI Stable aqueous compositions of reactive dyes

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

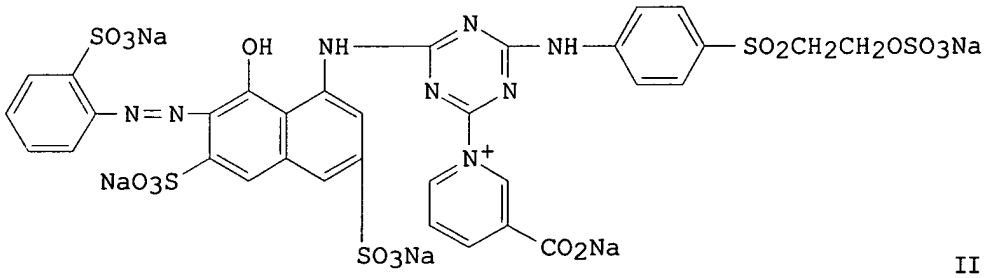
IN Morimitsu, Toshihiko; Omura, Takashi; Takeshita, Akira
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62043466	A2	19870225	JP 1985-183752	19850820
	JP 07051683	B4	19950605		
PRAI	JP 1985-183752		19850820		

GI



I



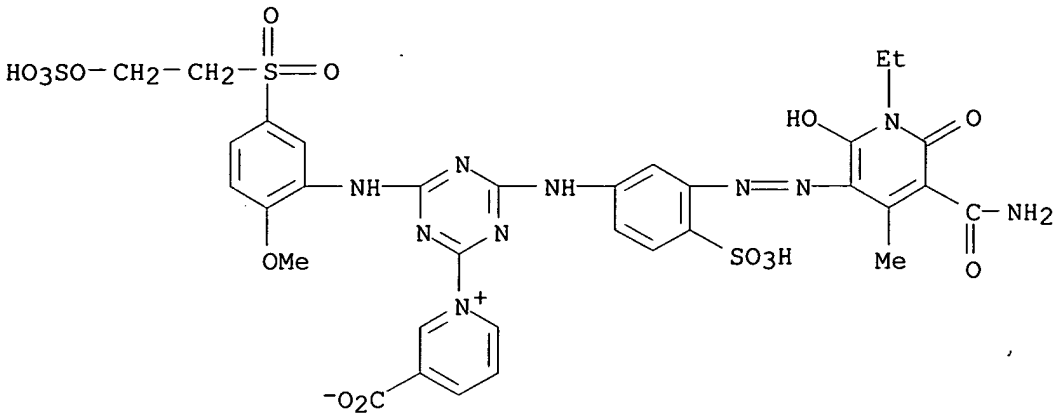
II

AB The title compns. contain 10-45% difunctional reactive dyes containing -SO2CH:CH2 or -SO2CH2CH2OSO3H and I group (when in acid form) at pH 2-6. Thus, 150 parts 15%-solids aqueous II (pH 4.5) was mixed with 36 parts spray-dried II (70%-solids) to give a composition with excellent storability.

IT **110111-42-7**
RL: USES (Uses)
(**dye**, stable aqueous compns. for)

RN 110111-42-7 HCAPLUS

CN Pyridinium, 1-[4-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]-6-[[2-methoxy-5-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]-3-carboxy-, inner salt, dipotassium salt (9CI) (CA INDEX NAME)

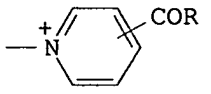


●2 K

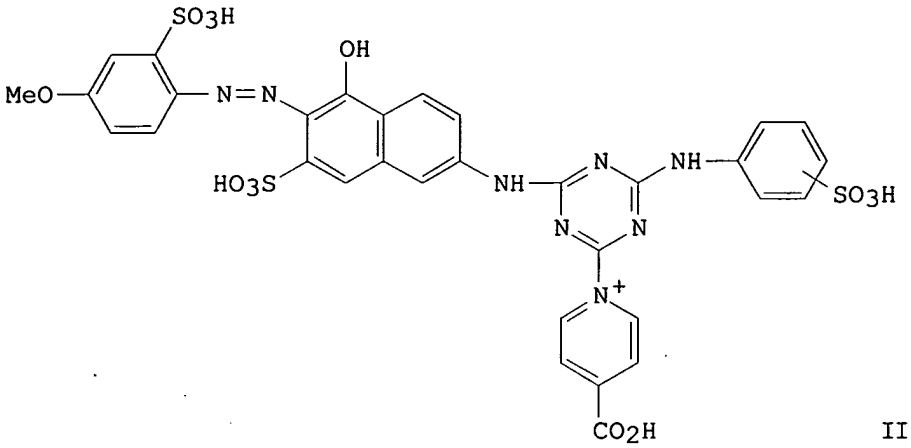
L16 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:578029 HCAPLUS
DN 107:178029
TI Dyeing nitrogen-containing fibers
IN Izutsu, Kyoto; Watanabe, Shigeyuki; Shirasaki, Toshitaka
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62053486	A2	19870309	JP 1985-188517	19850829
PRAI	JP 1985-188517		19850829		

GI



I



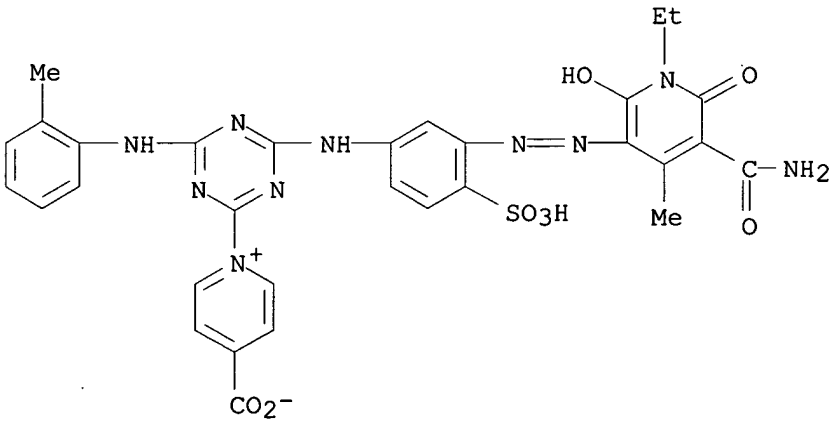
II

AB Wool, silk, and acrylic-wool blends were dyed with dyes containing ≥1 s-triazine group containing I group (R = OH, amino) at pH 4-9 at 80-120°. Thus, cyanuric chloride was condensed with a mixture of 3- and 4-aminobenzenesulfonic acids and 7-amino-4-hydroxy-3-(4-methoxy-2-sulfophenylazo)naphthalene-2-sulfonic acid and treated with isonicotinic acid at 90° for 8 h to give II as a 1:1 mixture of 3- and 4-SO3H isomers. With this dye wool gave a fast pink dyeing showing no dye fall off in 50% DMF at 100° for 1 h.

IT **109295-91-2 109295-92-3 109296-03-9 110162-43-1 110162-44-2**
RL: USES (Uses)
(**dye**, for nitrogen-containing fibers)

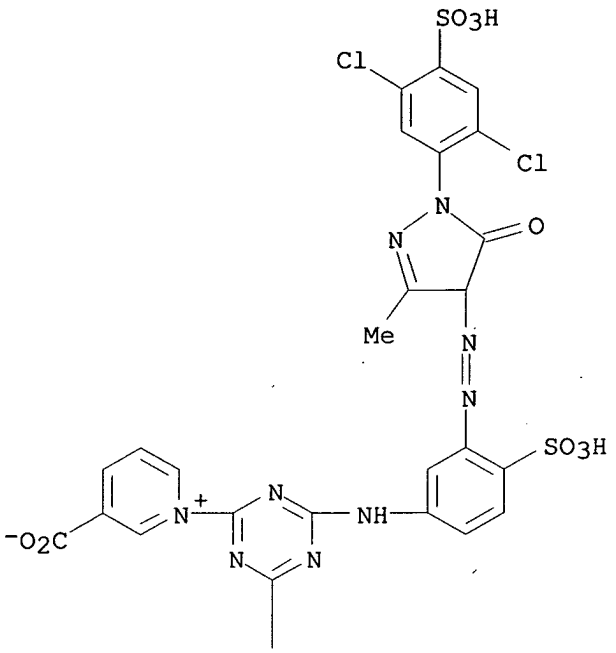
RN 109295-91-2 HCAPLUS

CN Pyridinium, 1-[4-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]-6-[(2-methylphenyl)amino]-1,3,5-triazin-2-yl]-4-carboxy-, inner salt (9CI) (CA INDEX NAME)

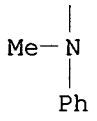


RN 109295-92-3 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A

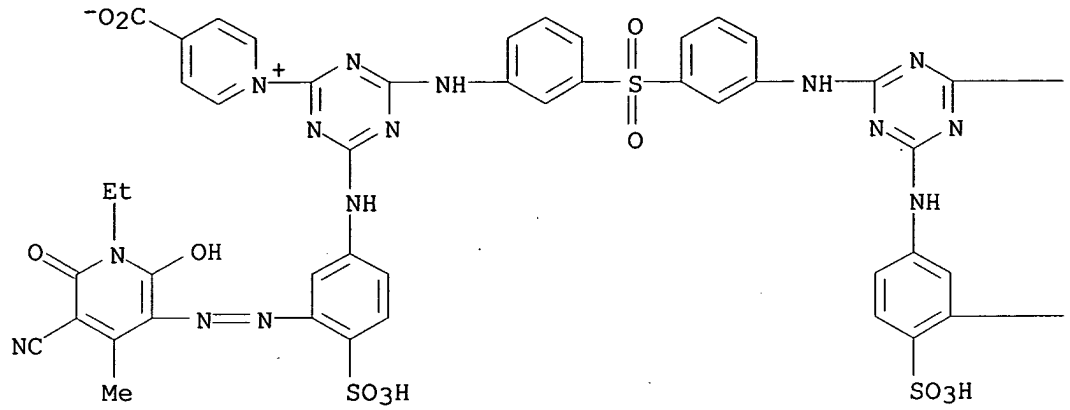


PAGE 2-A

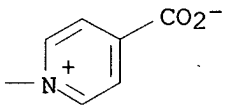


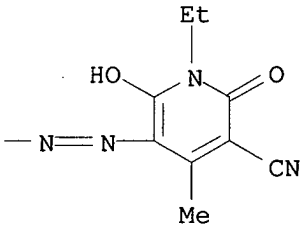
RN 109296-03-9 HCAPLUS
CN Pyridinium, 1,1'-[sulfonylbis[3,1-phenyleneimino[6-[[3-[(5-cyano-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl)azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



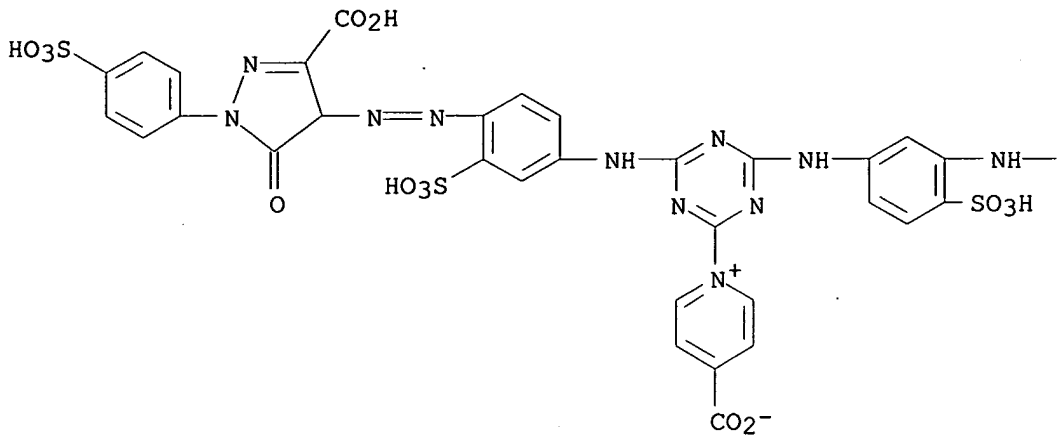
PAGE 1-B





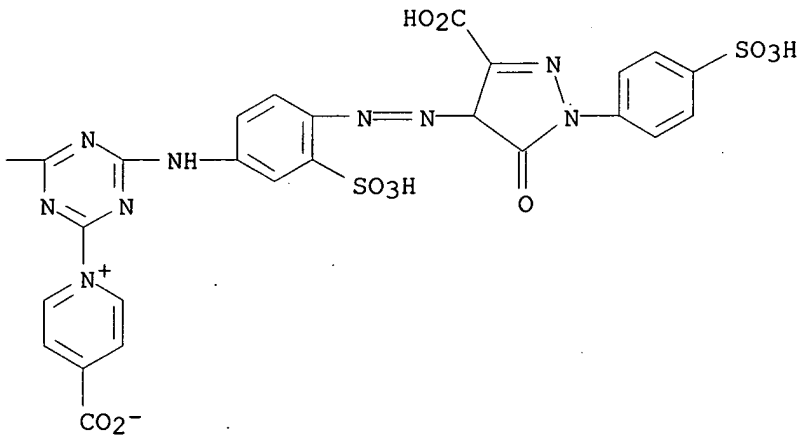
RN 110162-43-1 HCAPLUS
CN Pyridinium, 1,1'-[(4-sulfo-1,3-phenylene)bis[imino[6-[[4-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-3-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, bis(inner salt), disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



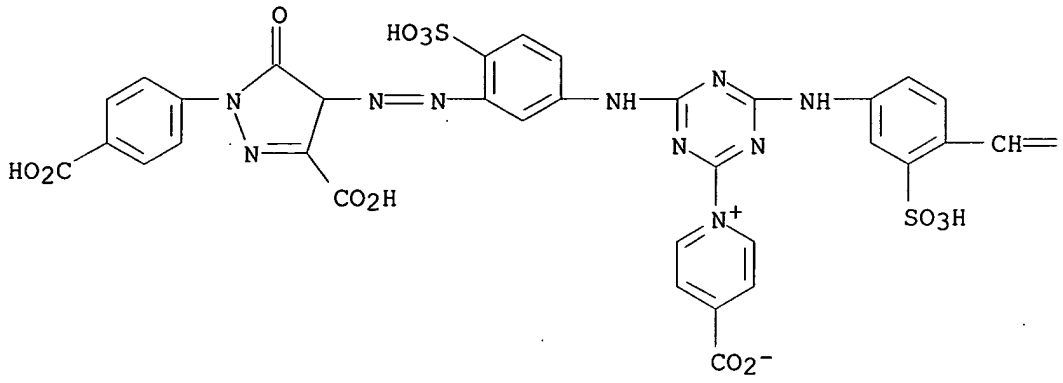
●2 Na

PAGE 1-B

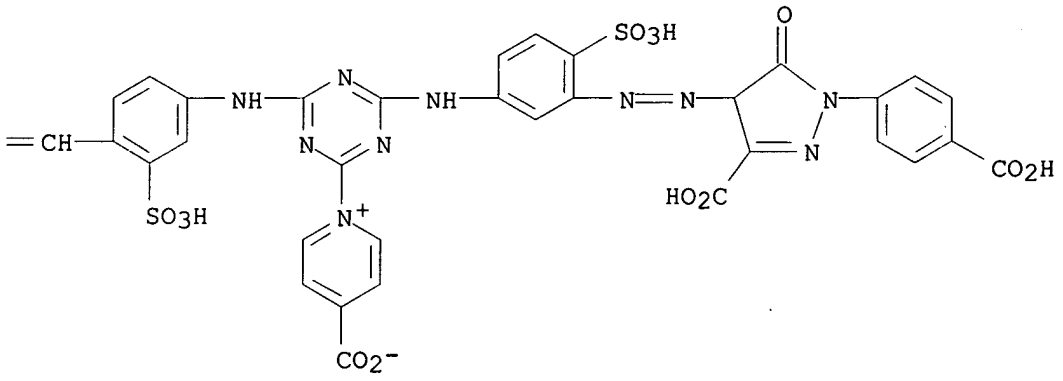


RN 110162-44-2 HCAPLUS
CN Pyridinium, 1,1'-[1,2-ethenediylbis[(3-sulfo-4,1-phenylene)imino[6-[[3-[[3-carboxy-1-(4-carboxyphenyl)-4,5-dihydro-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



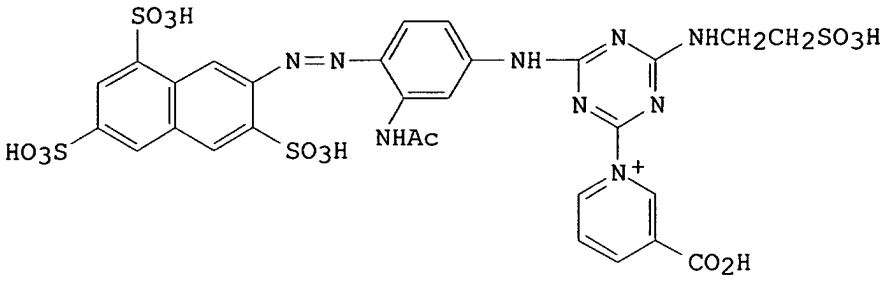
PAGE 1-B



L16 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:479474 HCAPLUS
DN 107:79474
TI One-bath dyeing of fiber blends
IN Izutsu, Kiyoto; Shirasaki, Toshitaka
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62006989	A2	19870113	JP 1985-140199	19850628
PRAI	JP 1985-140199		19850628		

GI



I

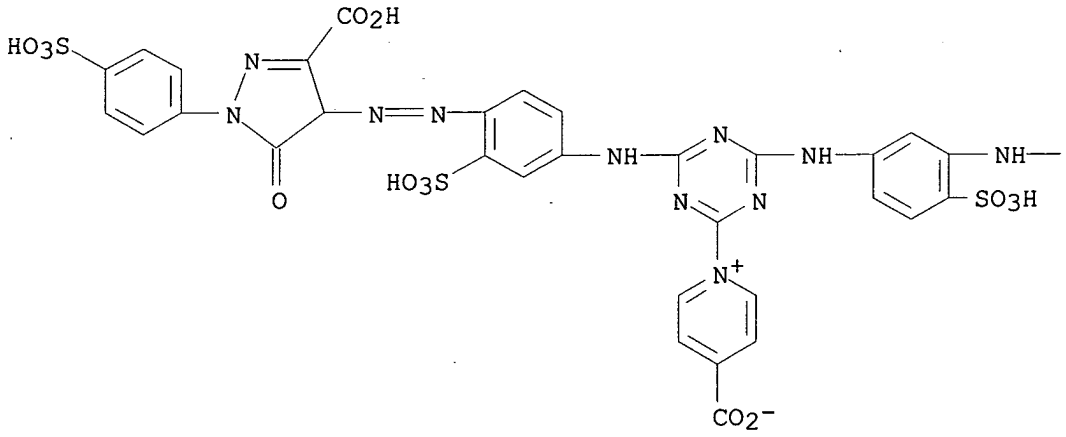
AB Reactive dyes containing a ZCOR group (Z = pyridinio moiety; R = OH, NH2) and ≥1 s-triazinyl group were prepared and used for dyeing fiber blends from cotton, rayon, and jute. Thus, 4-(3,6,8-trisulfo-2-naphthylazo)-3-acetamidoaniline in water was condensed with cyanuric chloride, 2-sulfoethanamine, and then nicotinic acid to give I, level reddish yellow on cotton-rayon blend.

IT **109295-88-7 109295-91-2 109295-92-3**
109296-00-6 109296-03-9
RL: USES (Uses)
(**dye**, for cellulosic fiber blends)

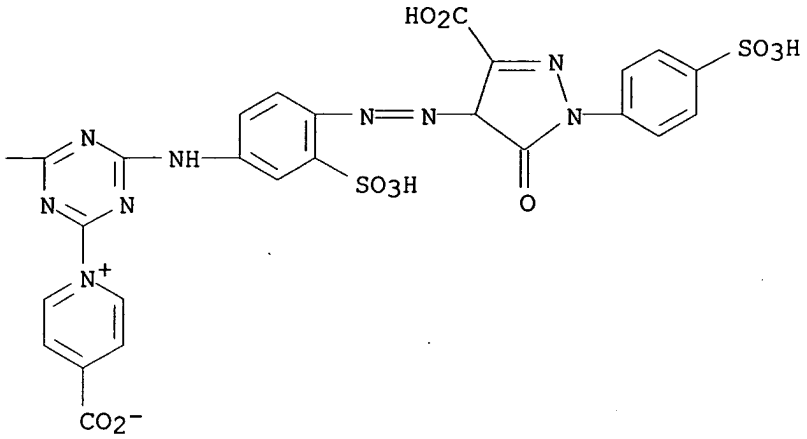
RN 109295-88-7 HCAPLUS

CN Pyridinium, 1,1'-[(4-sulfo-1,3-phenylene)bis[imino[6-[[4-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-3-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, bis(inner salt) (9CI) (CA INDEX NAME)

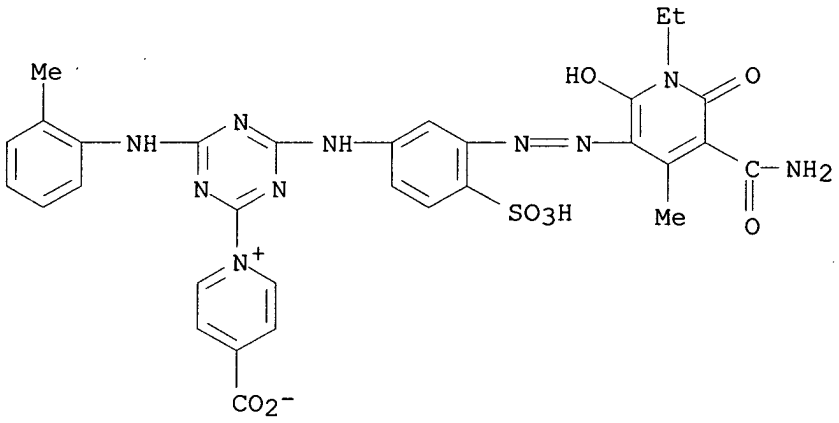
PAGE 1-A



PAGE 1-B

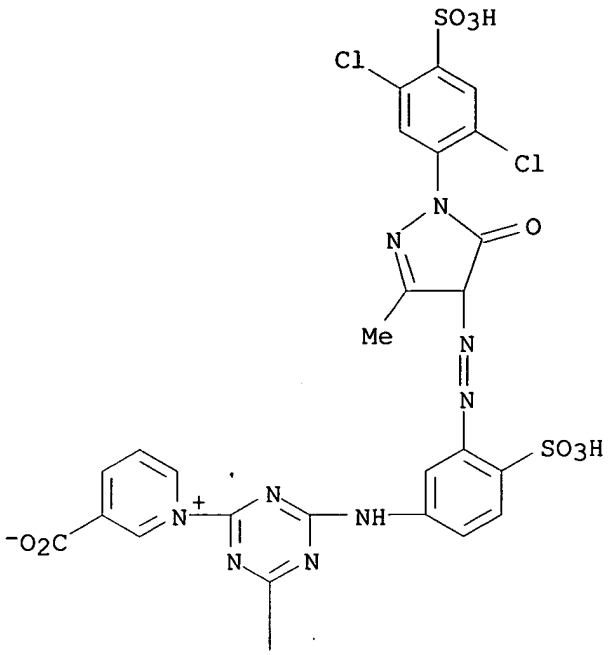


RN 109295-91-2 HCAPLUS
CN Pyridinium, 1-[4-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]-6-[(2-methylphenyl)amino]-1,3,5-triazin-2-yl]-4-carboxy-, inner salt (9CI) (CA INDEX NAME)

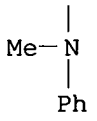


RN 109295-92-3 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(methylphenylamino)-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A



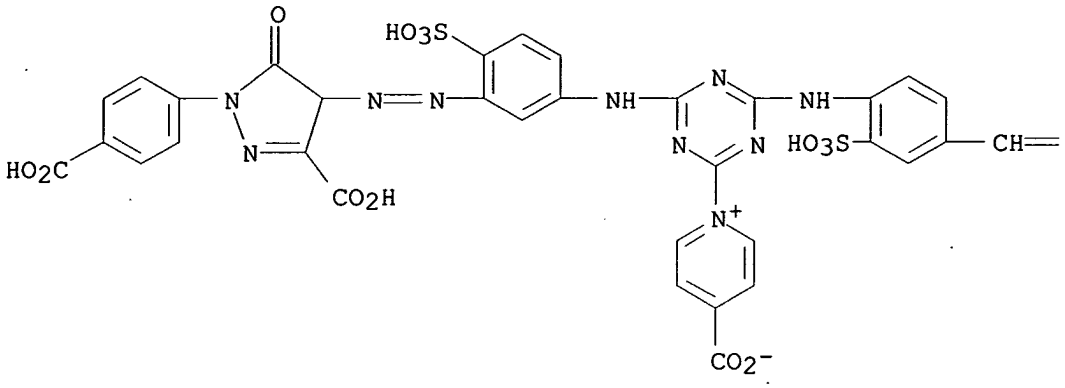
PAGE 2-A



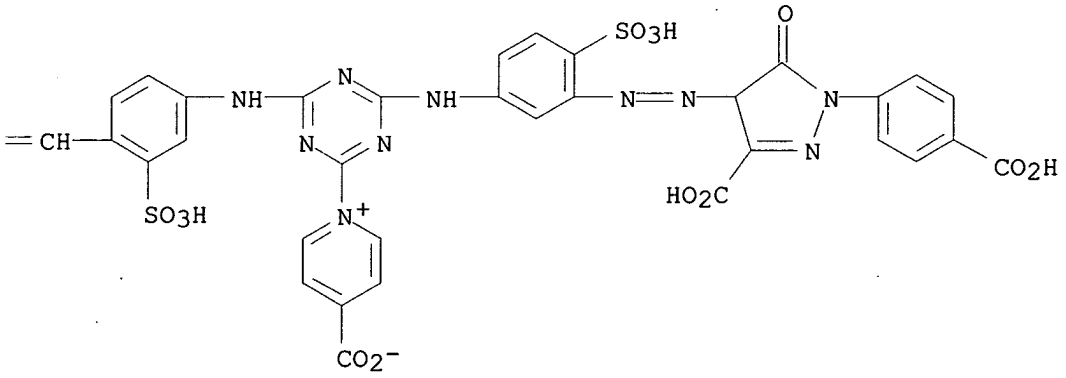
RN 109296-00-6 HCAPLUS

CN Pyridinium, 4-carboxy-1-[4-[[3-[[3-carboxy-1-(4-carboxyphenyl)-4,5-dihydro-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[[4-[2-[4-[[4-[[3-[[3-carboxy-1-(4-carboxyphenyl)-4,5-dihydro-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(4-carboxypyridinio)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]ethenyl]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

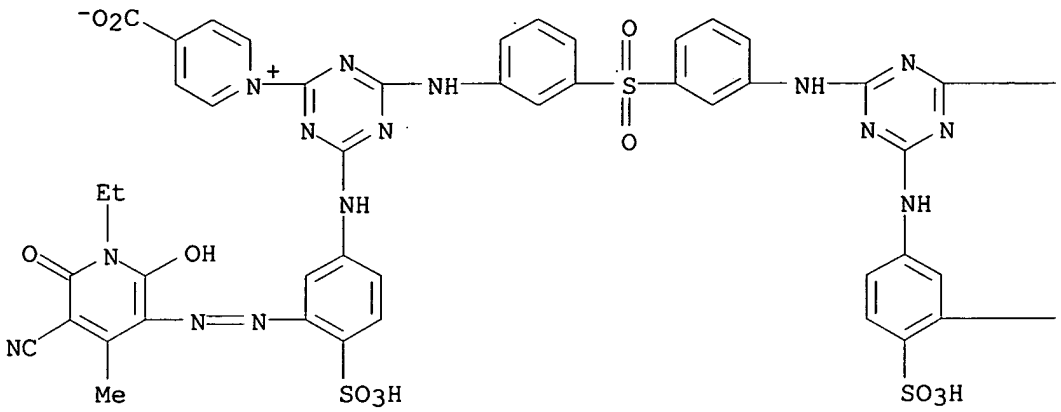


PAGE 1-B

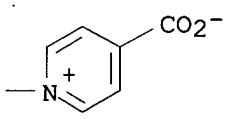


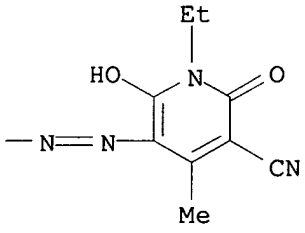
RN 109296-03-9 HCAPLUS
CN Pyridinium, 1,1'-[sulfonylbis[3,1-phenyleneimino[6-[[3-[(5-cyano-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl)azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

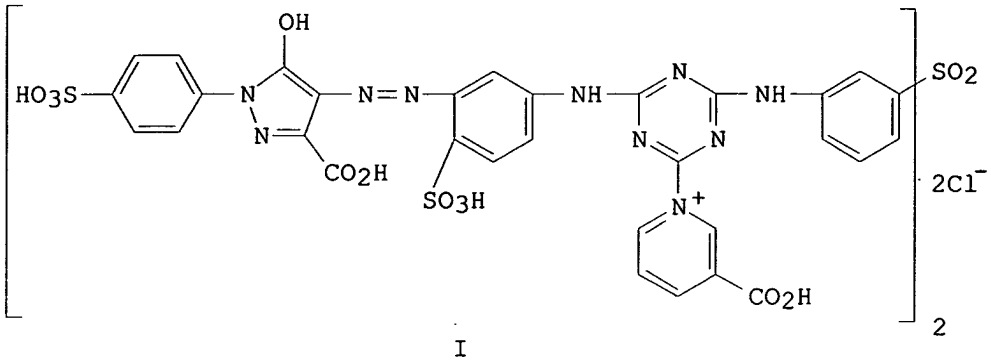




L16 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:215493 HCAPLUS
DN 106:215493
TI Reactive disazo dyes
IN Yamamura, Shigeo; Kojima, Masayoshi
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62010168	A2	19870119	JP 1985-149286	19850709
	JP 06006676	B4	19940126		
PRAI	JP 1985-149286		19850709		

GI



I

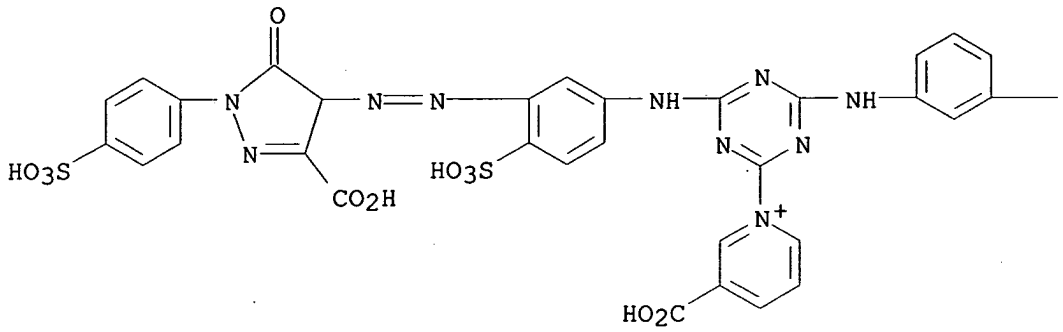
AB The yellow to greenish yellow multifunctional title dyes with excellent buildup properties and heat resistance, suitable for dyeing cellulosic fibers in one-bath-one-step dyeing of cellulose-polyester blends, were prepared and contain 2 pyrazolone groups and 2 s-triazine rings. Thus, cyanuric chloride was condensed with 2,4-diaminobenzenesulfonic acid, and the condensate was diazotized, coupled with 1-(4-sulfophenyl)-5-hydroxypyrazole-3-carboxylic acid, condensed with 3,3'-diaminodiphenyl sulfone, and treated with nicotinic acid to give I, greenish yellow on cotton.

IT **108469-43-8 108469-44-9 108469-45-0**
108469-46-1 108469-47-2 108469-48-3
108469-49-4 108469-50-7 108469-51-8
108469-52-9 108469-53-0 108469-54-1
108469-55-2 108469-56-3 108469-57-4
108469-58-5 108469-59-6 108469-60-9
108469-61-0 108469-62-1 108469-63-2
108469-64-3 108469-65-4 108469-66-5
108469-67-6 108469-68-7 108469-69-8
108469-70-1 108469-71-2 108469-72-3
108469-73-4 108470-64-0 108507-09-1
108507-10-4 108507-11-5 108507-12-6
108507-13-7 108507-14-8
RL: TEM (Technical or engineered material use); USES (Uses)
(**dye**, for cotton)

RN 108469-43-8 HCAPLUS

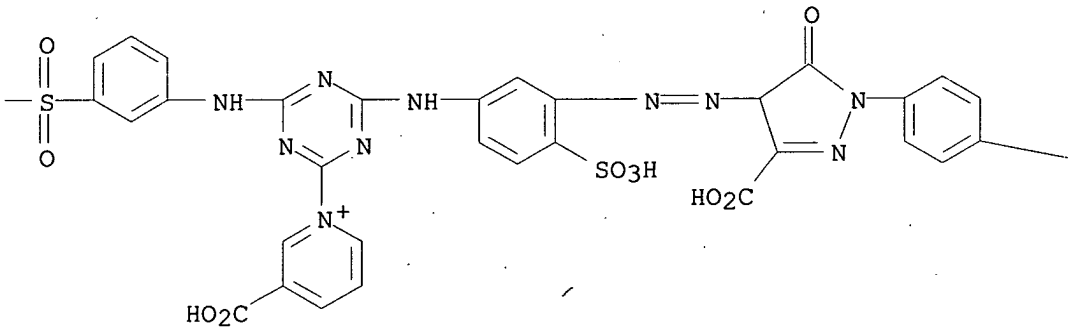
CN Pyridinium, 1,1'-[sulfonylbis[3,1-phenyleneimino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl⁻

PAGE 1-B

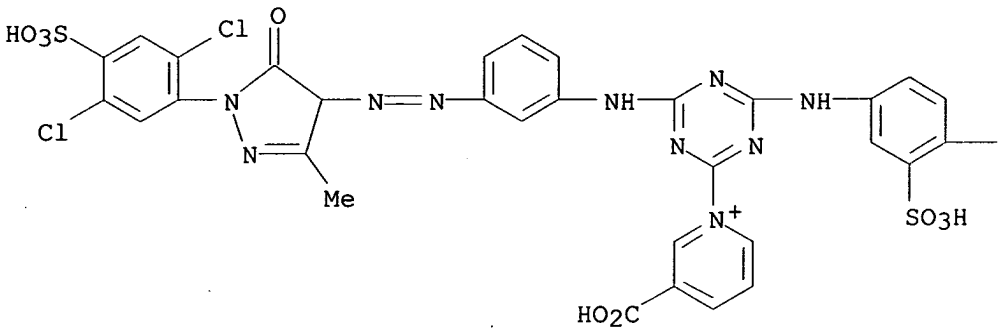


PAGE 1-C

SO3H

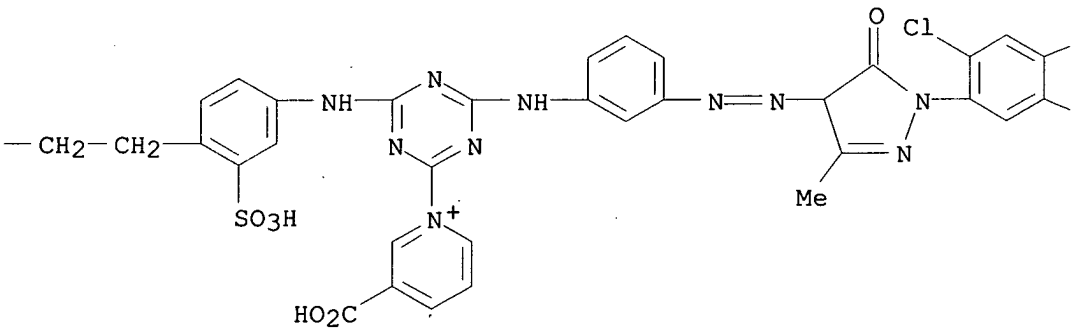
RN 108469-44-9 HCAPLUS
CN Pyridinium, 1,1'-[1,2-ethanediylbis[(3-sulfo-4,1-phenylene)imino[6-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]phenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

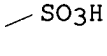


●2 Cl⁻

PAGE 1-B

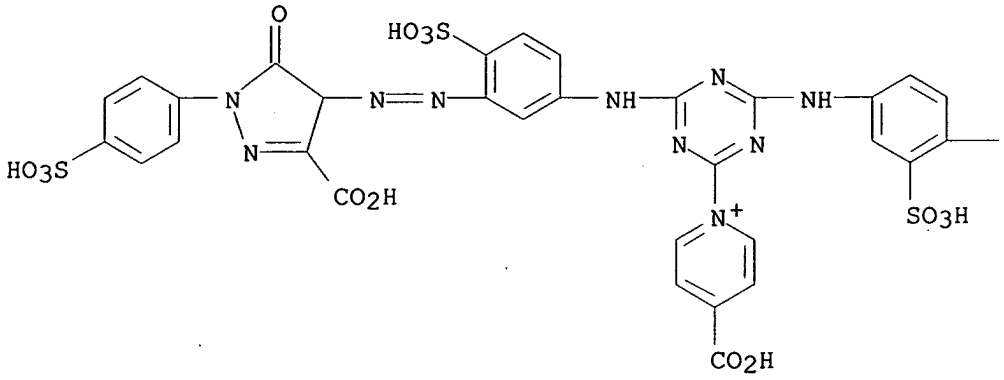


PAGE 1-C



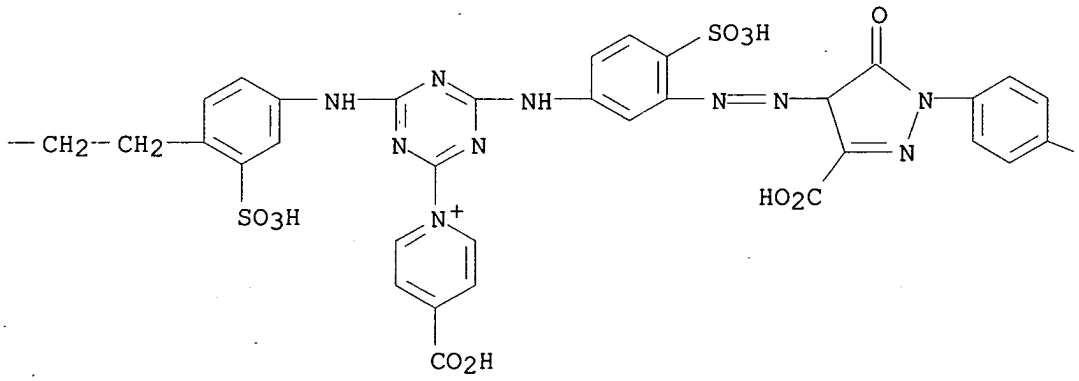
RN 108469-45-0 HCAPLUS
CN Pyridinium, 1,1'-[1,2-ethanediylbis[(3-sulfo-4,1-phenylene)imino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

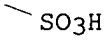


●2 Cl⁻

PAGE 1-B



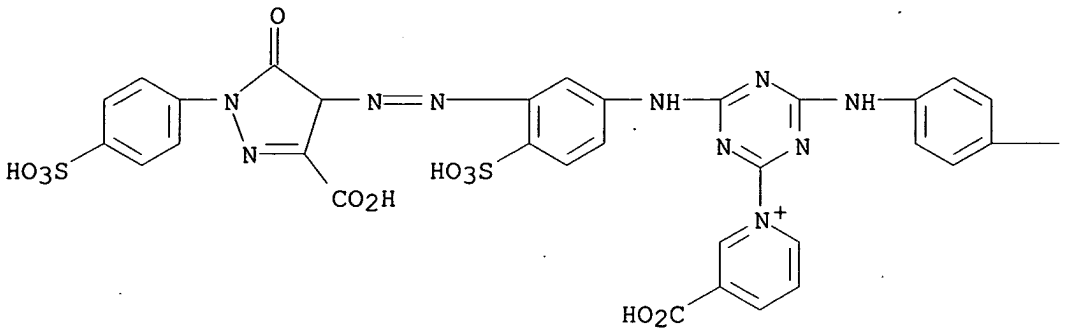
PAGE 1-C



RN 108469-46-1 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[[4-[[4-[[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(3-carboxypyridinio)-1,3,5-triazin-2-yl]amino]benzoyl]amino]-3-sulfophenyl]amino]-1,3,5-triazin-2-yl]-,

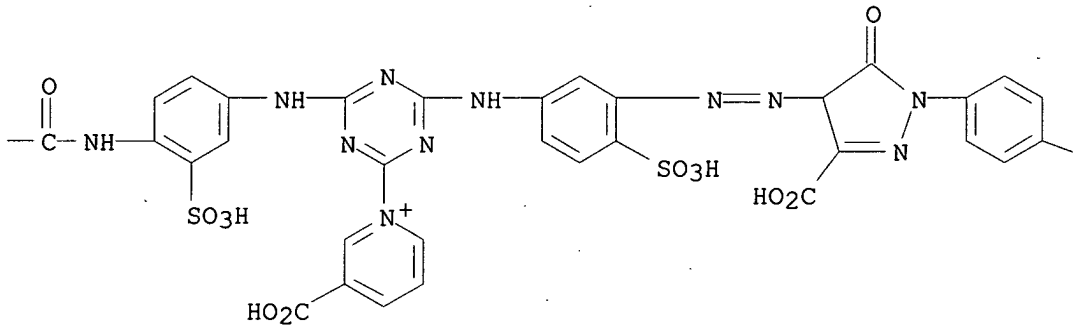
dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl⁻

PAGE 1-B

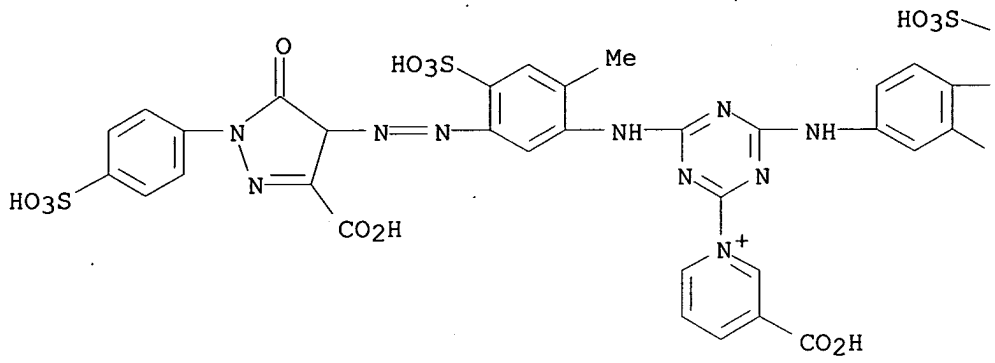


PAGE 1-C

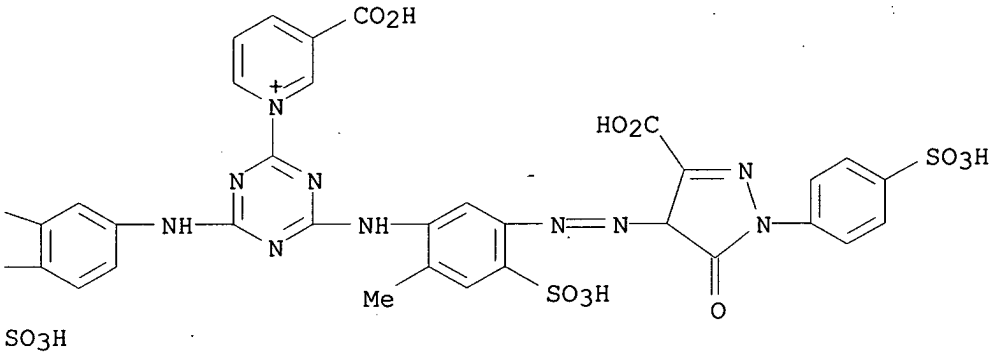
SO3H

RN 108469-47-2 HCAPLUS
CN Pyridinium, 1,1'-[(2,2'-disulfo[1,1'-biphenyl]-4,4'-diyl)bis[imino[6-[[5-[[3-carbonyl-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-2-methyl-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

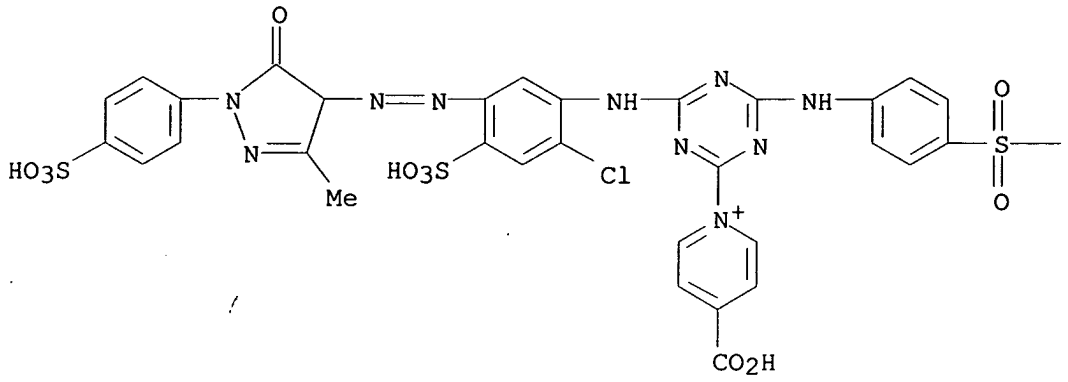


PAGE 2-A

●2 Cl^-

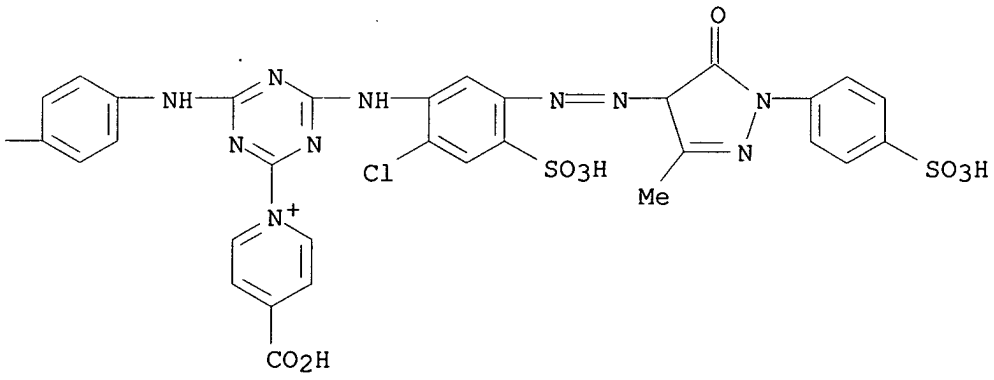
RN 108469-48-3 HCAPLUS
CN Pyridinium, 1,1'-[sulfonylbis[4,1-phenyleneimino[6-[[2-chloro-5-[[4,5-dihydro-3-methyl-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



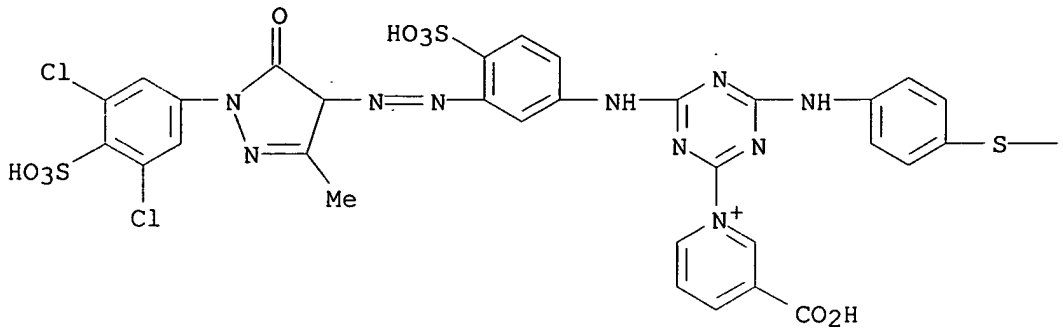
●2 Cl⁻

PAGE 1-B



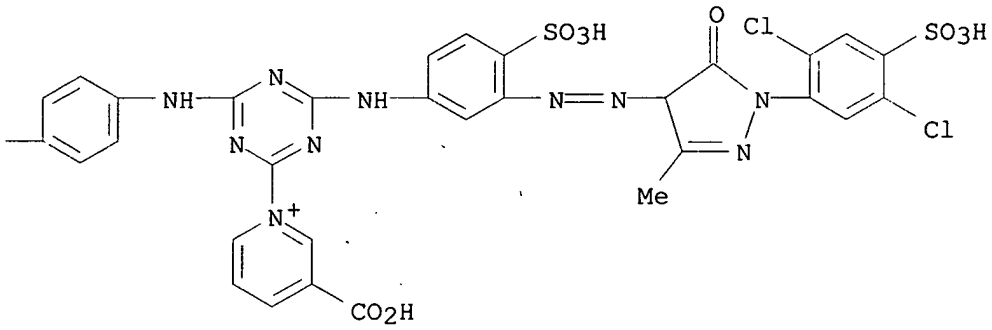
RN 108469-49-4 HCAPLUS
CN Pyridinium, 1,1'-[thiobis[4,1-phenyleneimino[6-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



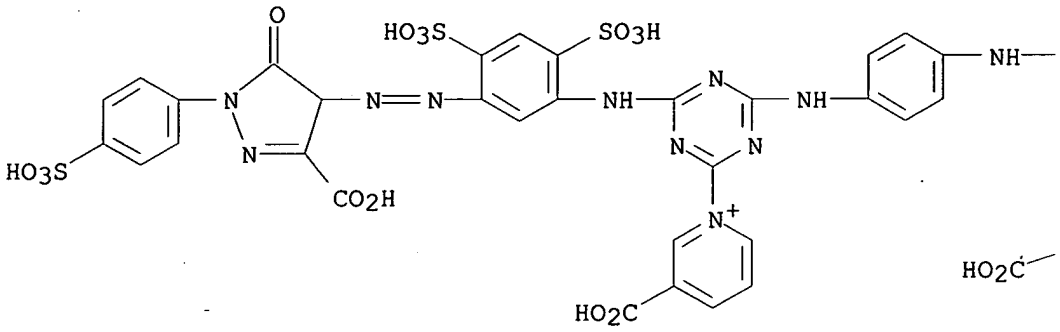
●2 Cl^-

PAGE 1-B



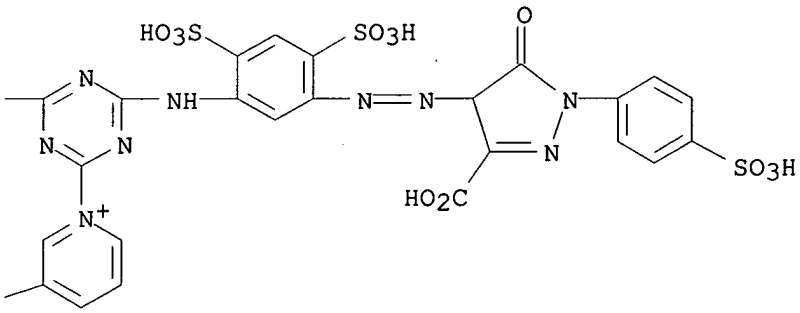
RN 108469-50-7 HCAPLUS
CN Pyridinium, 1,1'-[1,4-phenylenebis[imino[6-[[5-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-2,4-disulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



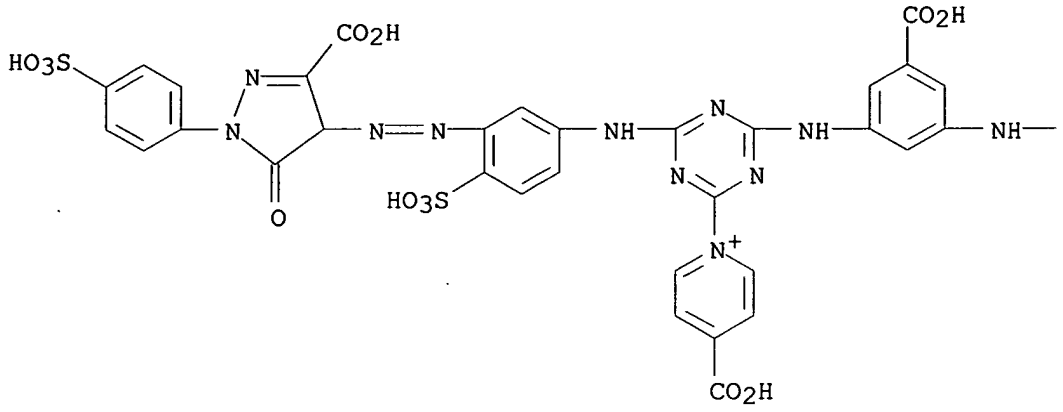
●2 Cl⁻

PAGE 1-B



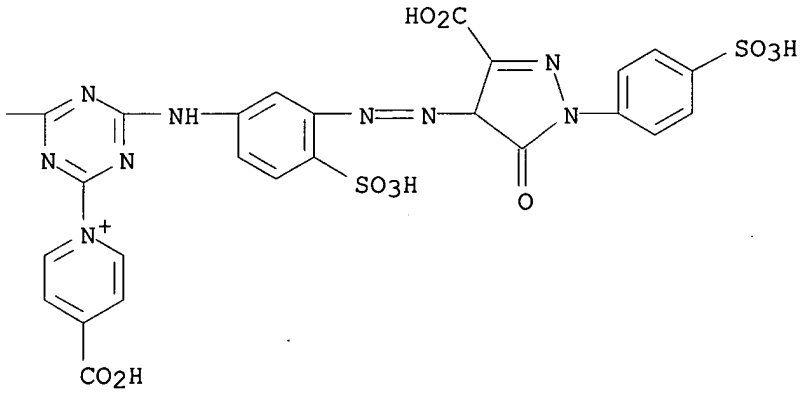
RN 108469-51-8 HCAPLUS
CN Pyridinium, 1,1'-[(5-carboxy-1,3-phenylene)bis[imino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



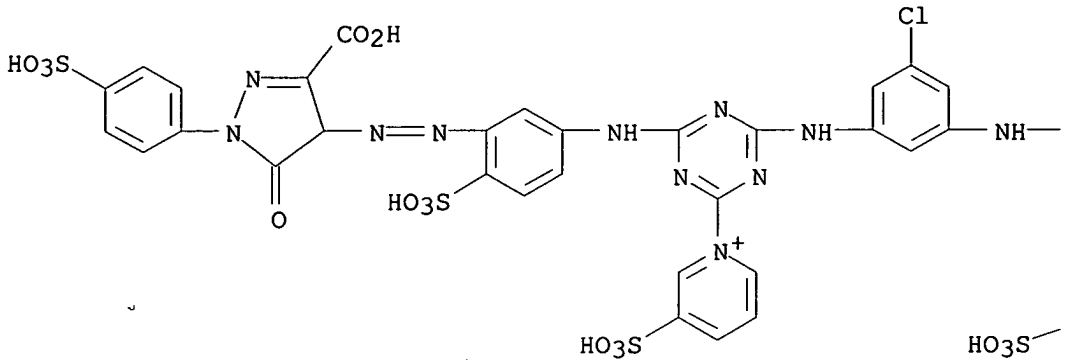
●2 Cl⁻

PAGE 1-B



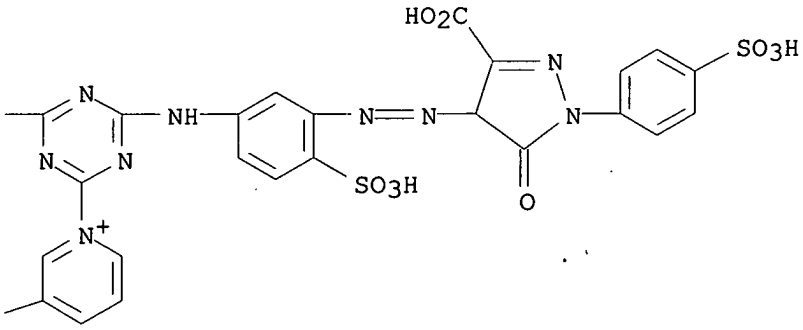
RN 108469-52-9 HCAPLUS
CN Pyridinium, 1,1'-[(5-chloro-1,3-phenylene)bis[imino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-sulfo-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



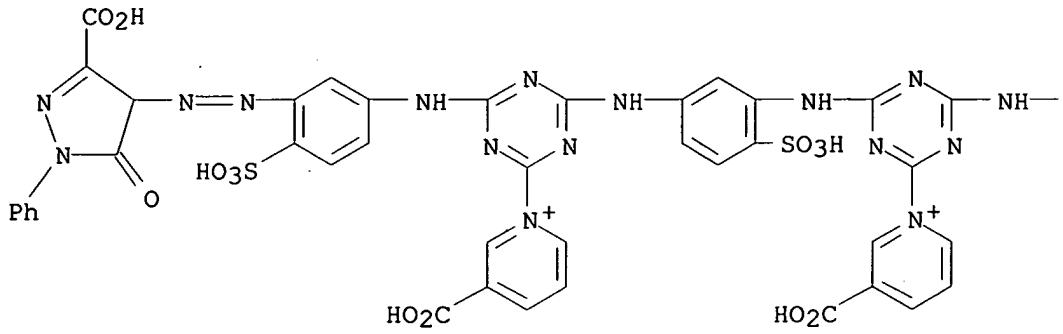
●2 Cl⁻

PAGE 1-B



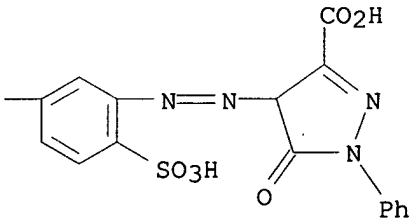
RN 108469-53-0 HCAPLUS
CN Pyridinium, 1,1'-[(4-sulfo-1,3-phenylene)bis[imino[6-[[3-[(3-carboxy-4,5-dihydro-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



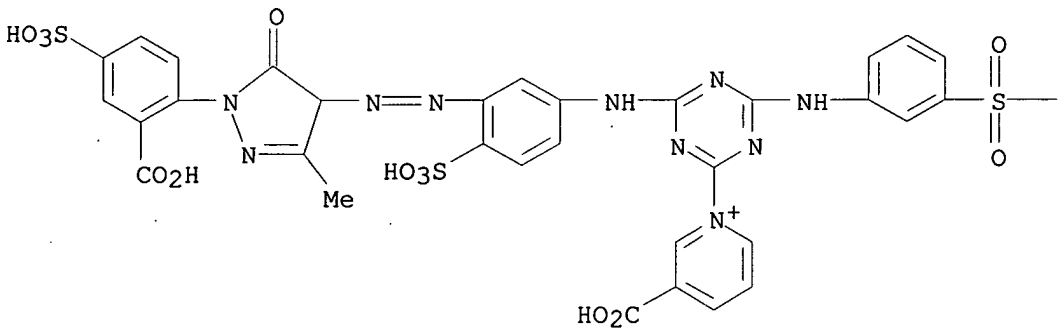
●2 Cl⁻

PAGE 1-B



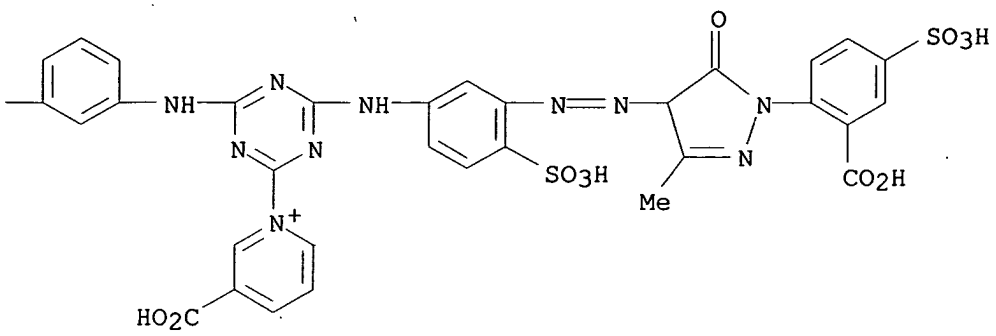
RN 108469-54-1 HCAPLUS
CN Pyridinium, 1,1'-[sulfonylbis[3,1-phenyleneimino[6-[[3-[[1-(2-carboxy-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



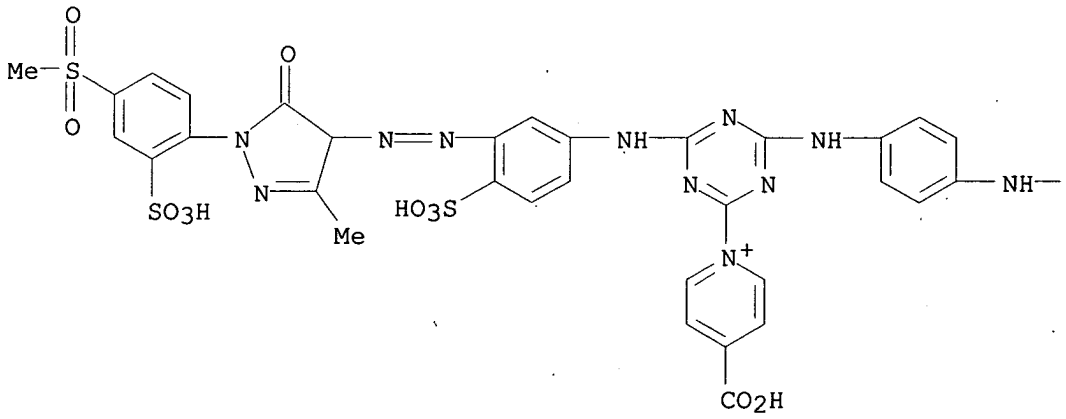
●2 Cl⁻

PAGE 1-B



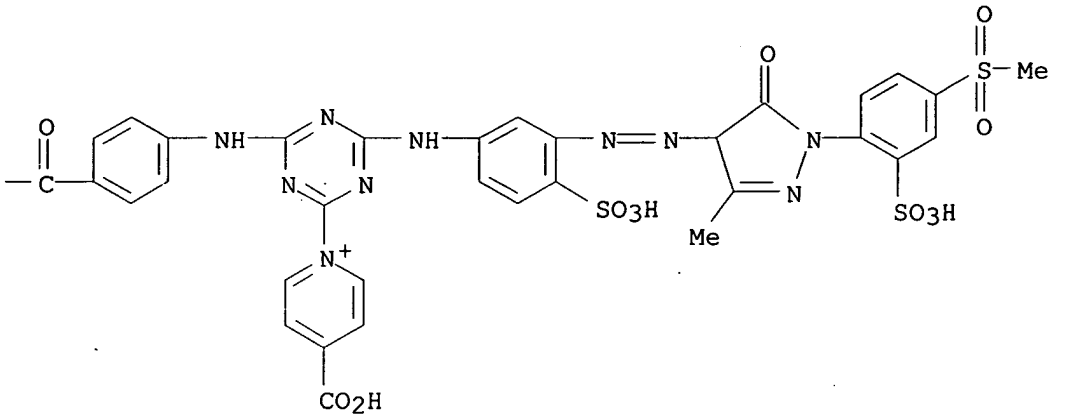
RN 108469-55-2 HCAPLUS
CN Pyridinium, 4-carboxy-1-[4-[[4-[[4-[[4-(4-carboxypyridinio)-6-[[3-[[4,5-dihydro-3-methyl-1-[4-(methylsulfonyl)-2-sulfophenyl]-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]amino]benzoyl]amino]phenyl]amino]-6-[[3-[[4,5-dihydro-3-methyl-1-[4-(methylsulfonyl)-2-sulfophenyl]-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



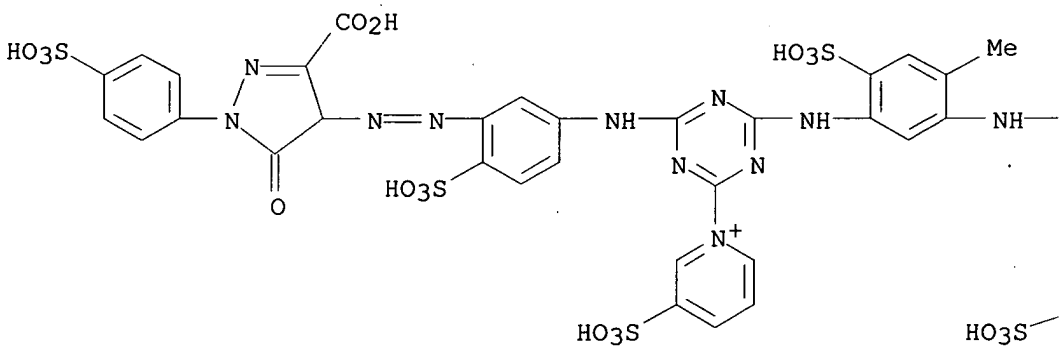
●2 Cl⁻

PAGE 1-B



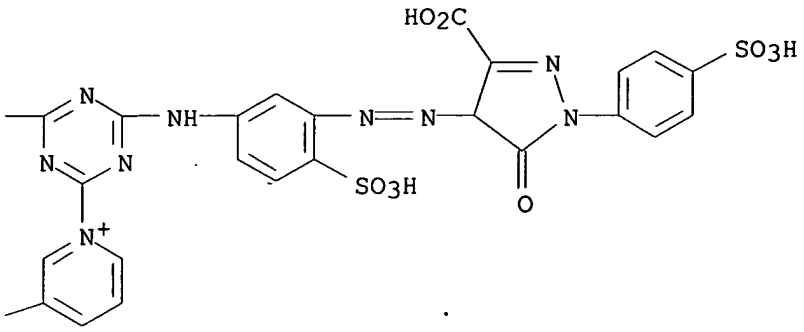
RN 108469-56-3 HCAPLUS
CN Pyridinium, 1,1'-[(4-methyl-6-sulfo-1,3-phenylene)bis[imino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-sulfo-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



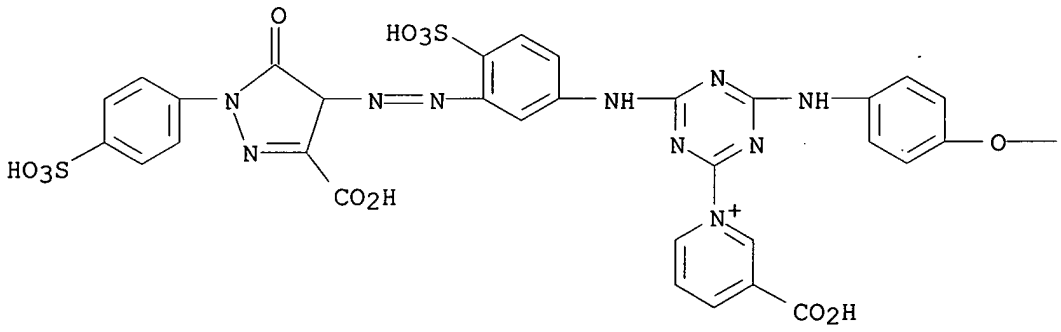
● 2 Cl⁻

PAGE 1-B



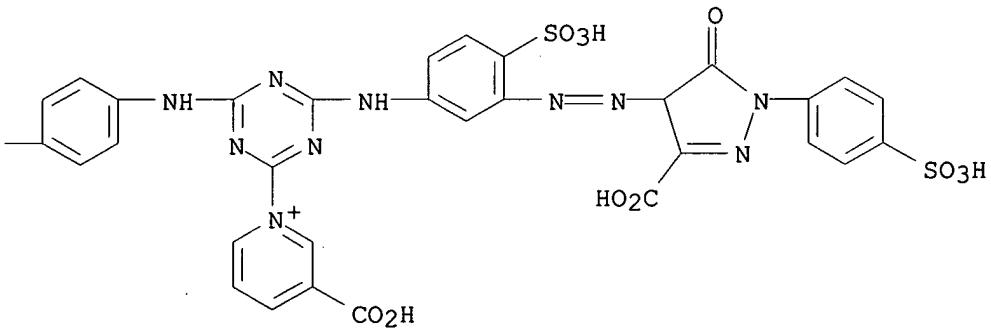
RN 108469-57-4 HCAPLUS
CN Pyridinium, 1,1'-[oxybis[4,1-phenyleneimino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



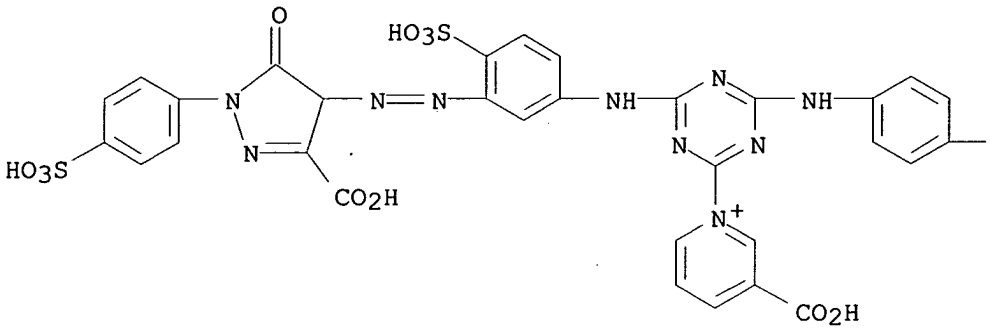
●2 Cl⁻

PAGE 1-B



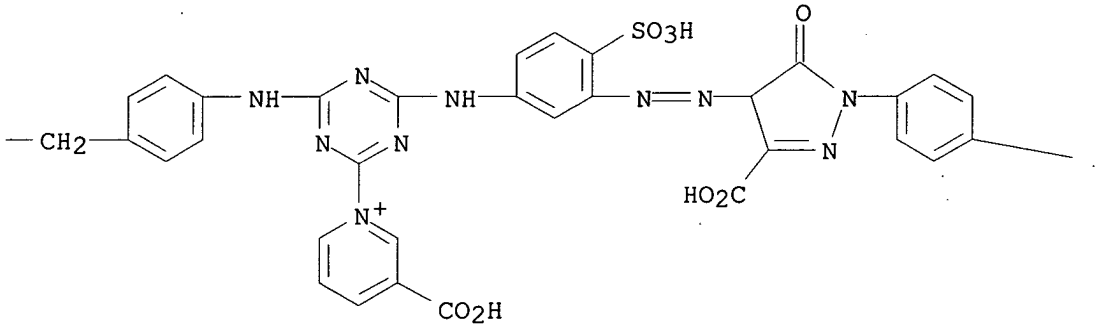
RN 108469-58-5 HCAPLUS
CN Pyridinium, 1,1'-[methylenebis[4,1-phenyleneimino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl⁻

PAGE 1-B



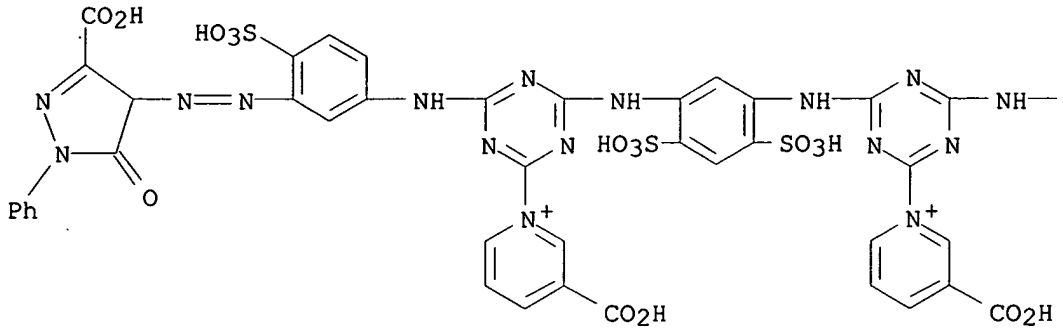
PAGE 1-C

—SO3H

RN 108469-59-6 HCAPLUS
CN Pyridinium, 1,1'-[(4,6-disulfo-1,3-phenylene)bis[imino[6-[[3-[(3-carboxy-

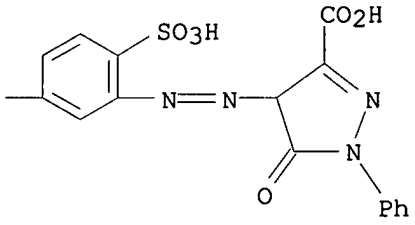
4,5-dihydro-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl^-

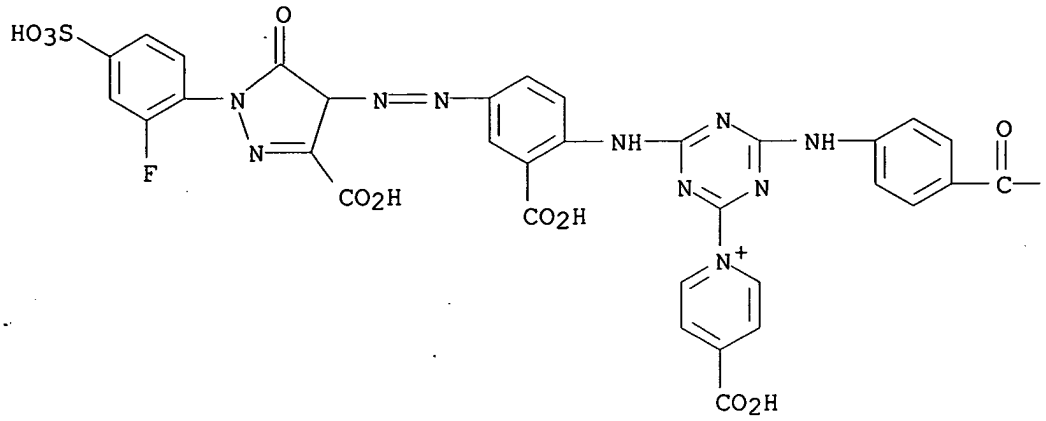
PAGE 1-B



RN 108469-60-9 HCAPLUS

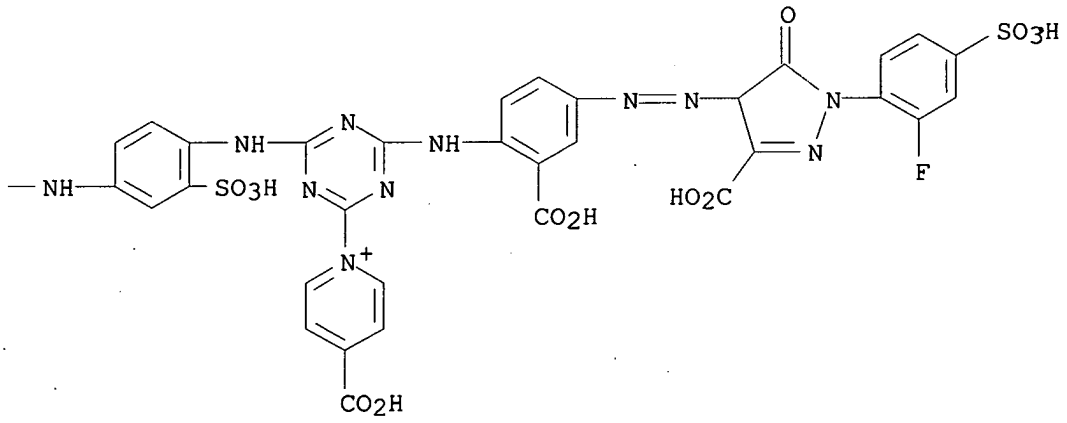
CN Pyridinium, 4-carboxy-1-[4-[[2-carboxy-4-[[3-carboxy-1-(2-fluoro-4-sulfophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-4-yl]azo]phenyl]amino]-6-[[4-[[4-[[2-carboxy-4-[[3-carboxy-1-(2-fluoro-4-sulfophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-4-yl]azo]phenyl]amino]-6-(4-carboxypyridinio)-1,3,5-triazin-2-yl]amino]benzoyl]amino]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



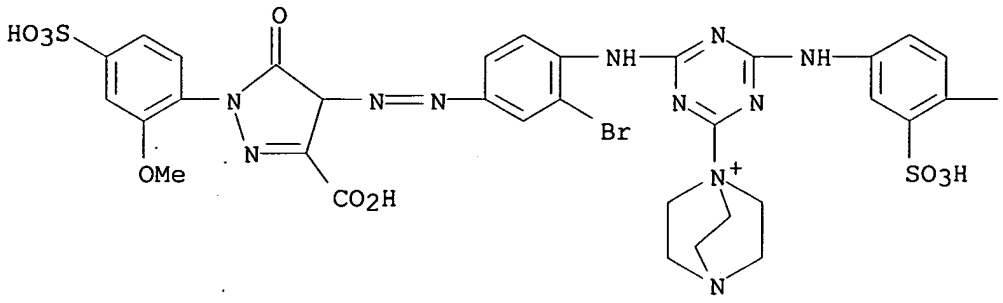
●2 Cl⁻

PAGE 1-B



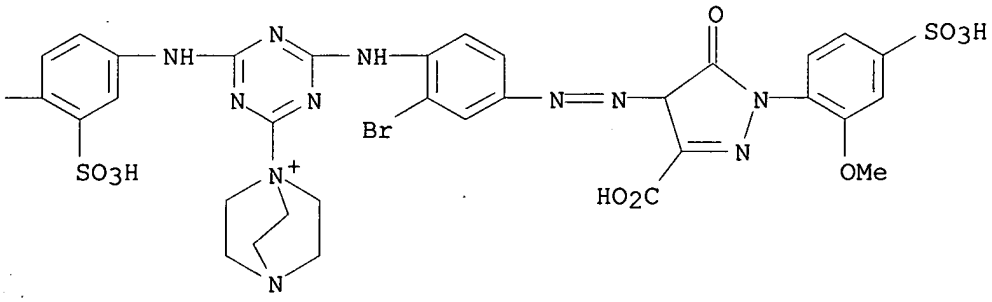
RN 108469-61-0 HCAPLUS
CN 4-Aza-1-azoniabicyclo[2.2.2]octane, 1,1'-[(2,2'-disulfo[1,1'-biphenyl]-4,4'-diyl)bis[imino[6-[[2-bromo-4-[[3-carboxy-4,5-dihydro-1-(2-methoxy-4-sulfophenyl)-5-oxo-1H-pyrazol-4-yl]azo]phenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



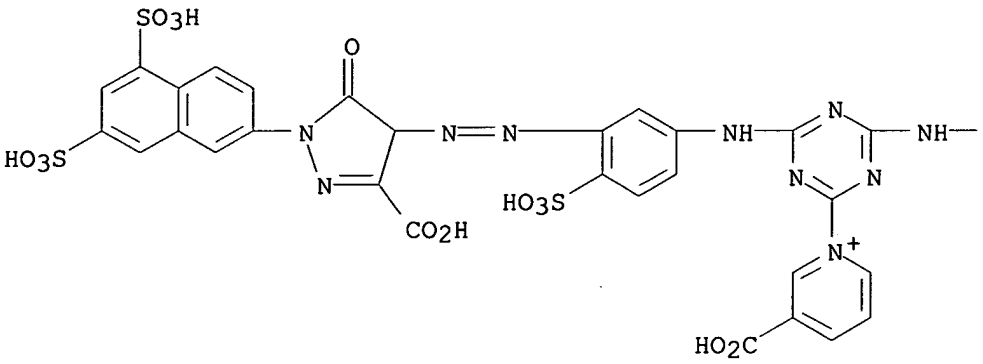
●2 Cl⁻

PAGE 1-B



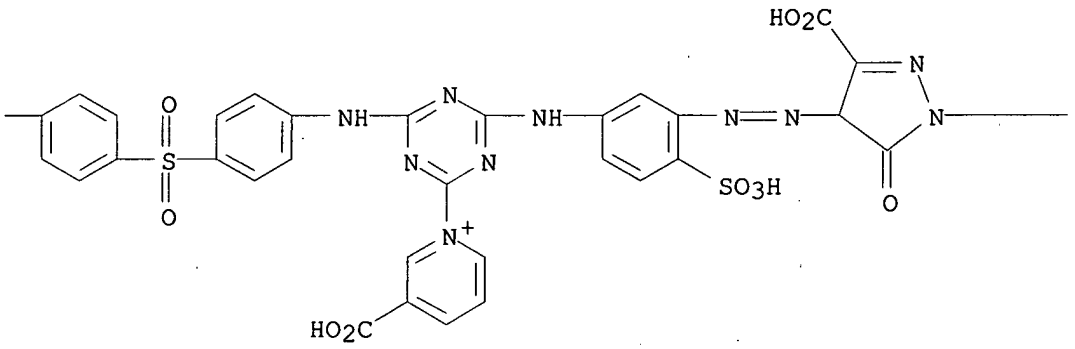
RN 108469-62-1 HCAPLUS
CN Pyridinium, 1,1'-[sulfonylbis[4,1-phenyleneimino[6-[[3-[[3-carboxy-1-(5,7-disulfo-2-naphthalenyl)-4,5-dihydro-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

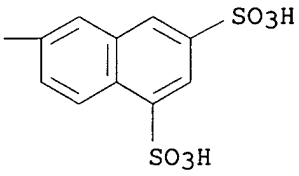


●2 Cl^-

PAGE 1-B



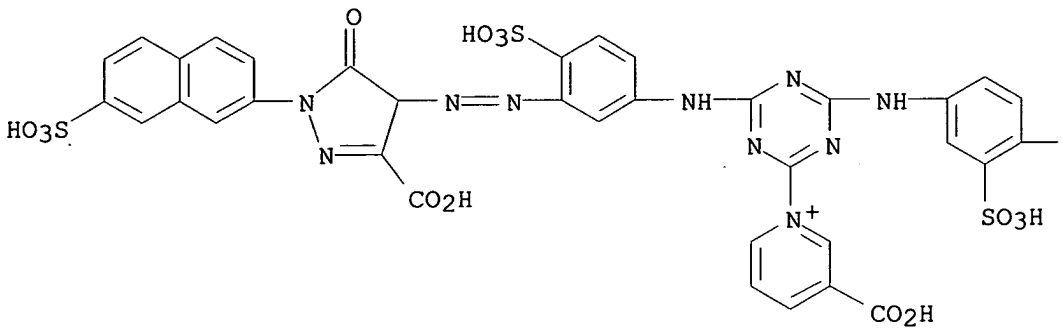
PAGE 1-C



RN 108469-63-2 HCAPLUS
CN Pyridinium, 1,1'-[methylenebis[(3-sulfo-4,1-phenylene)imino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(7-sulfo-2-naphthalenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride

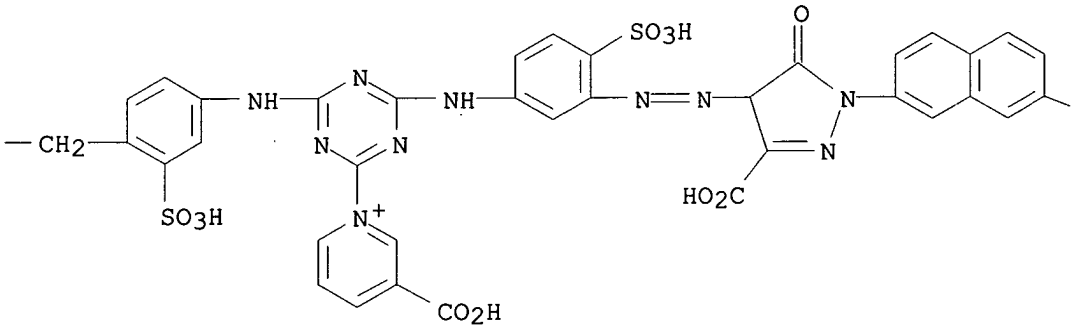
(9CI) (CA INDEX NAME)

PAGE 1-A

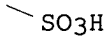


●2 Cl⁻

PAGE 1-B

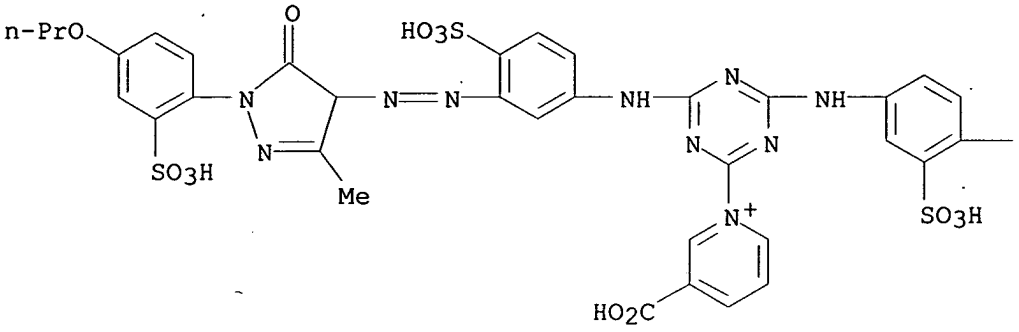


PAGE 1-C



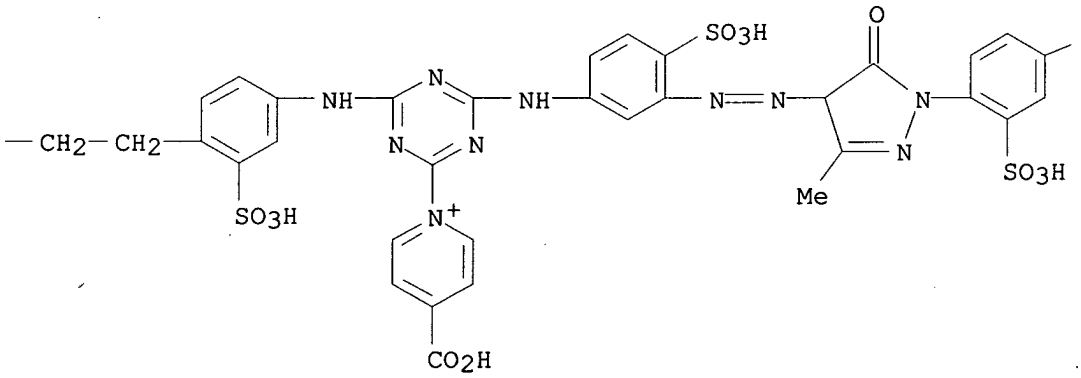
RN 108469-64-3 HCAPLUS
CN Pyridinium, 1,1'-[1,2-ethanediylbis[(3-sulfo-4,1-phenylene)imino[6-[[3-[[4,5-dihydro-3-methyl-5-oxo-1-(4-propoxy-2-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl⁻

PAGE 1-B

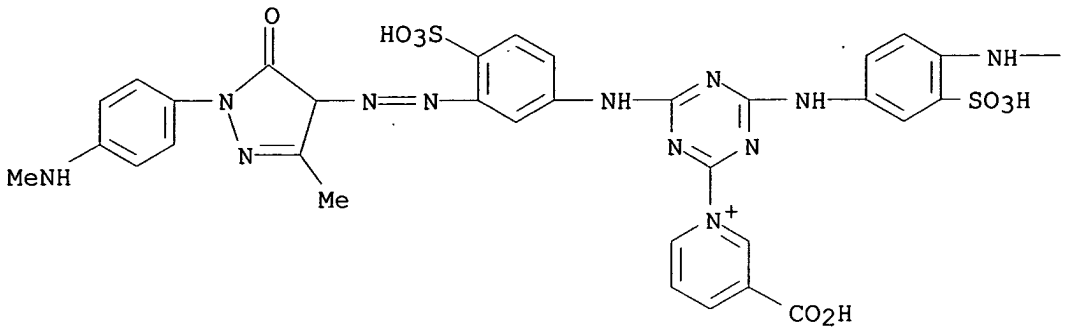


PAGE 1-C

OPr-n

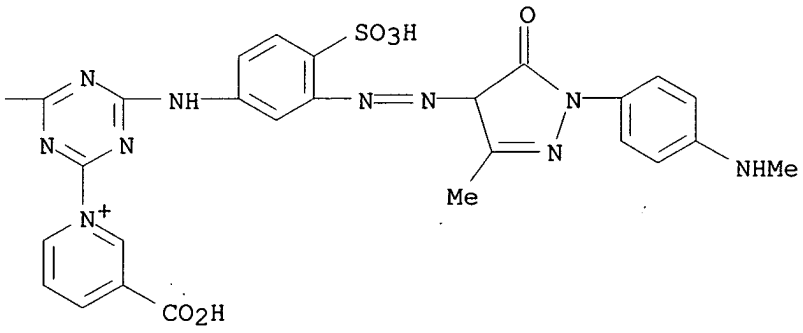
RN 108469-65-4 HCAPLUS
CN Pyridinium, 1,1'-[(2-sulfo-1,4-phenylene)bis[imino[6-[[3-[[4,5-dihydro-3-methyl-1-[4-(methylamino)phenyl]-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



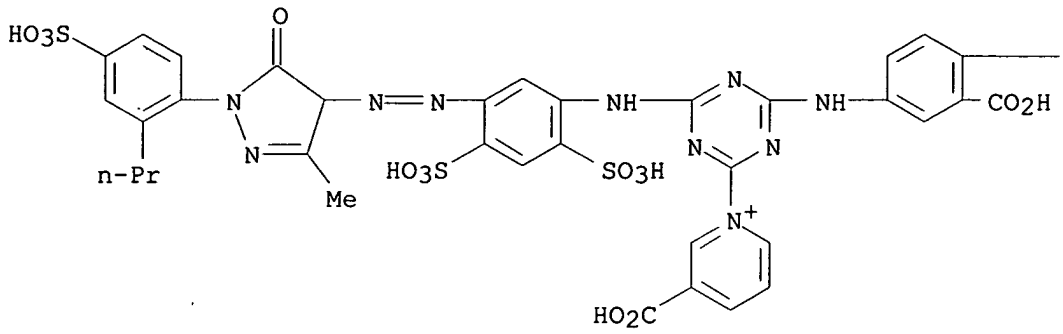
●2 Cl⁻

PAGE 1-B



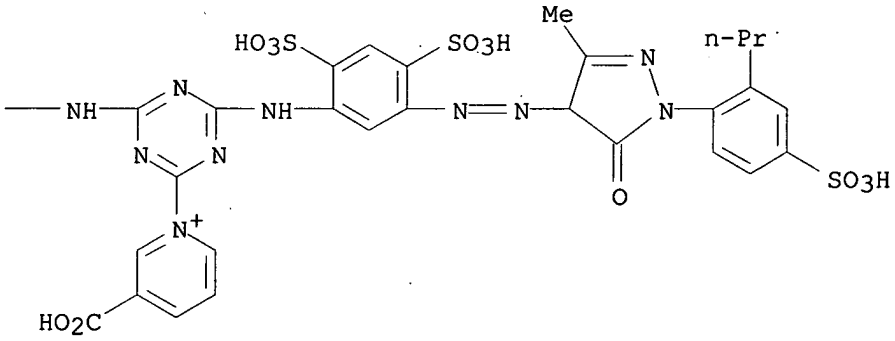
RN 108469-66-5 HCAPLUS
CN Pyridinium, 1,1'-[(2-carboxy-1,4-phenylene)bis[imino[6-[[5-[[4,5-dihydro-3-methyl-5-oxo-1-(2-propyl-4-sulfophenyl)-1H-pyrazol-4-yl]azo]-2,4-disulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



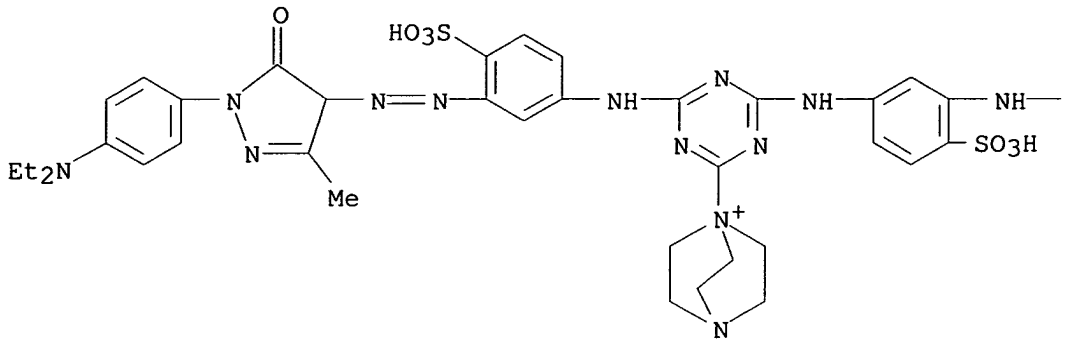
●2 Cl⁻

PAGE 1-B



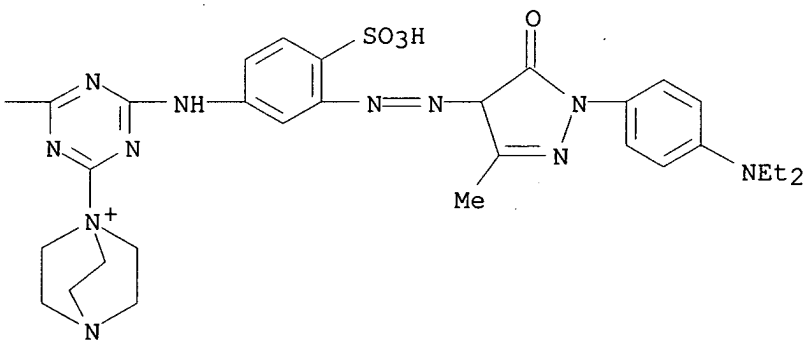
RN 108469-67-6 HCAPLUS
CN 4-Aza-1-azoniabicyclo[2.2.2]octane, 1,1'-[(4-sulfo-1,3-phenylene)bis[imino[6-[[3-[[1-[4-(diethylamino)phenyl]-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



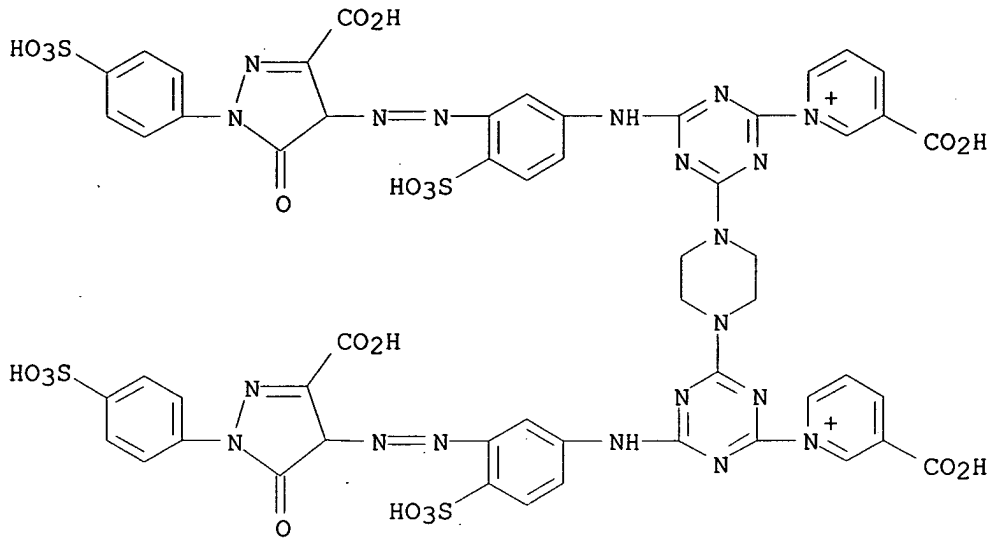
●2 Cl⁻

PAGE 1-B



RN 108469-68-7 HCAPLUS
CN Pyridinium, 1,1'-[1,4-piperazinediylbis[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

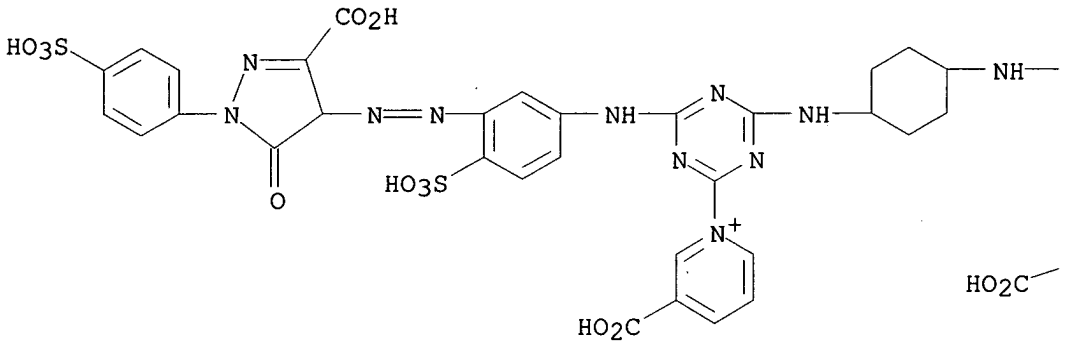


PAGE 2-A

●2 Cl⁻

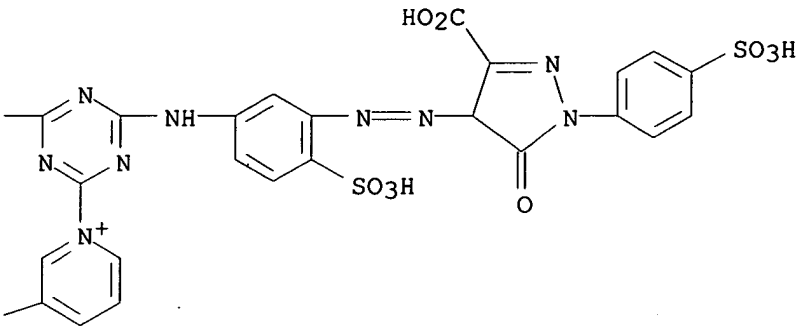
RN 108469-69-8 HCAPLUS
CN Pyridinium, 1,1'-[1,4-cyclohexanediylbis[imino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



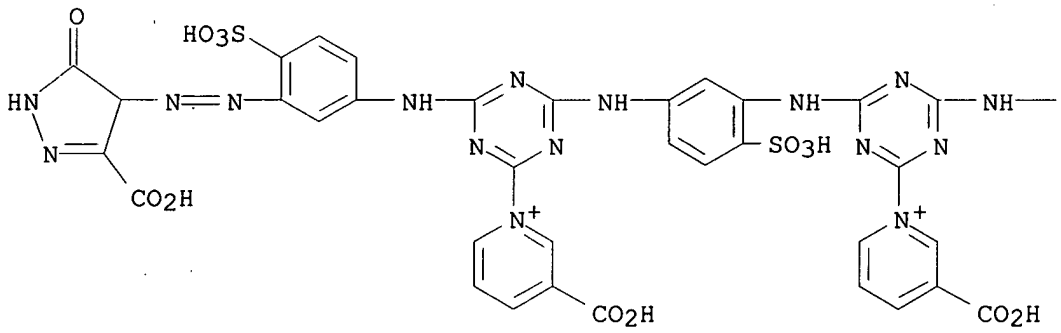
●2 Cl⁻

PAGE 1-B



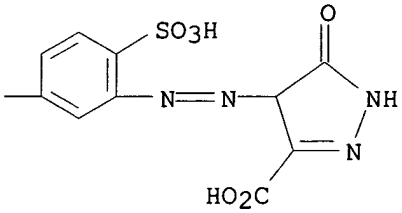
RN 108469-70-1 HCAPLUS
CN Pyridinium, 1,1'-[(4-sulfo-1,3-phenylene)bis[imino[6-[[3-[(3-carboxy-4,5-dihydro-5-oxo-1H-pyrazol-4-yl)azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl⁻

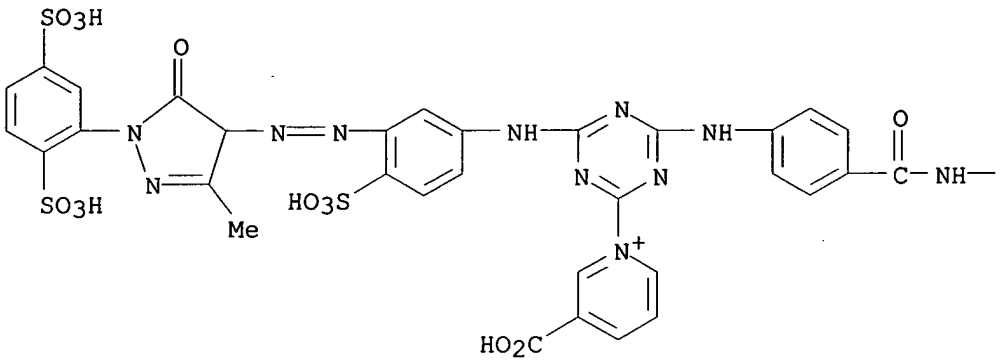
PAGE 1-B



RN 108469-71-2 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[4-[[4-[[4-(3-carboxypyridinio)-6-[[3-[[1-(2,5-disulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-

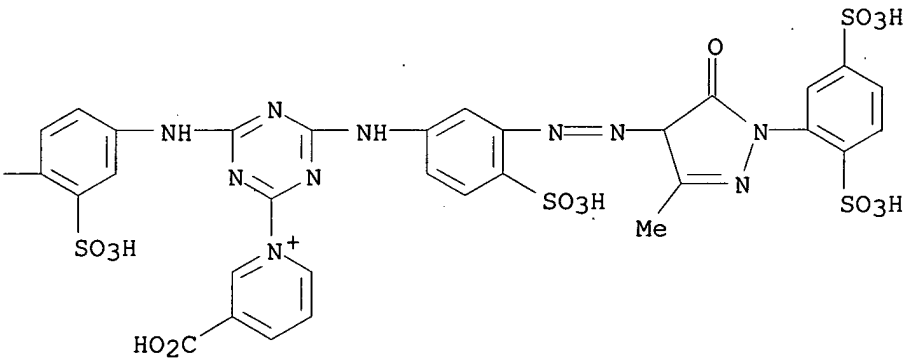
sulfophenyl]amino]-1,3,5-triazin-2-yl]amino]benzoyl]amino]-3-sulfophenyl]amino]-6-[[3-[[1-(2,5-disulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



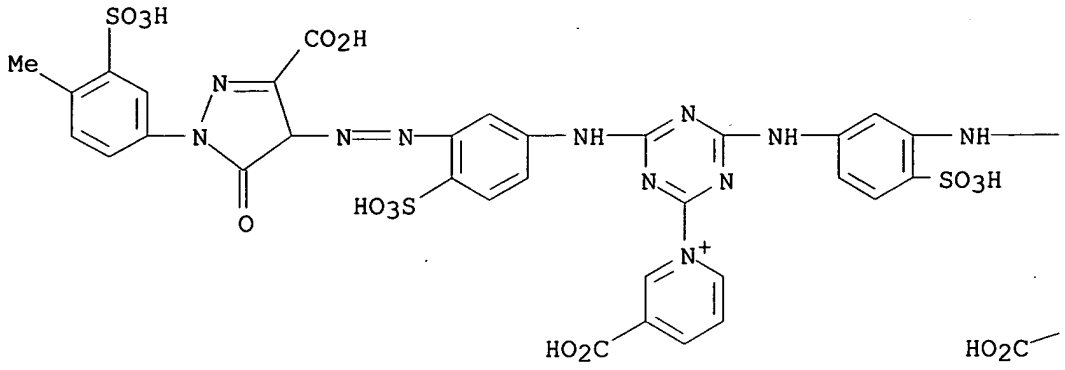
●2 Cl⁻

PAGE 1-B



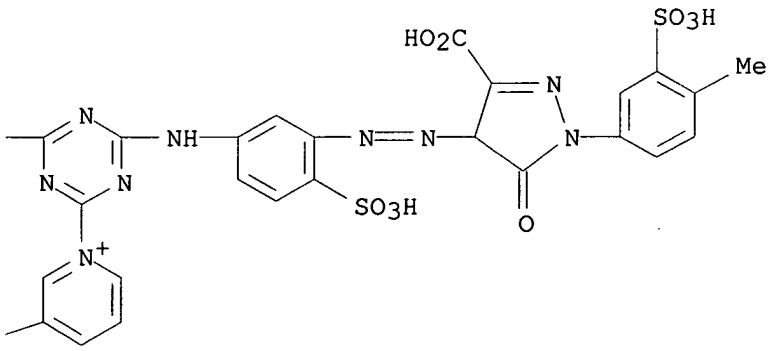
RN 108469-72-3 HCAPLUS
CN Pyridinium, 1,1'-[(4-sulfo-1,3-phenylene)bis[imino[6-[[3-[[3-carboxy-4,5-dihydro-1-(4-methyl-3-sulfophenyl)-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



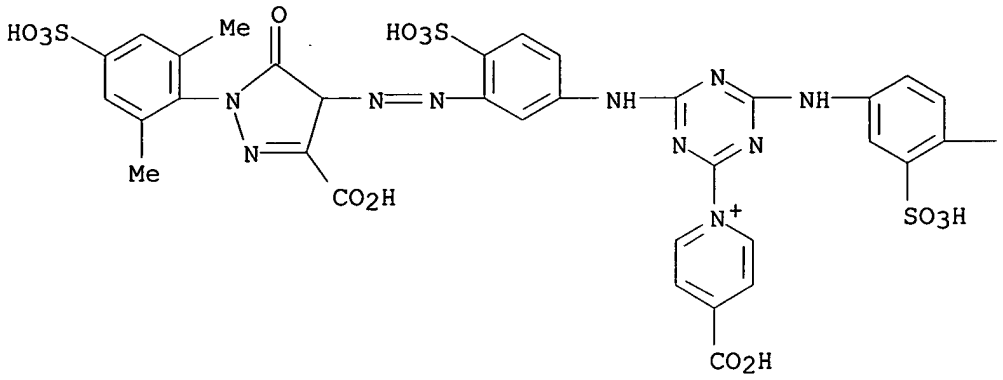
●2 Cl⁻

PAGE 1-B



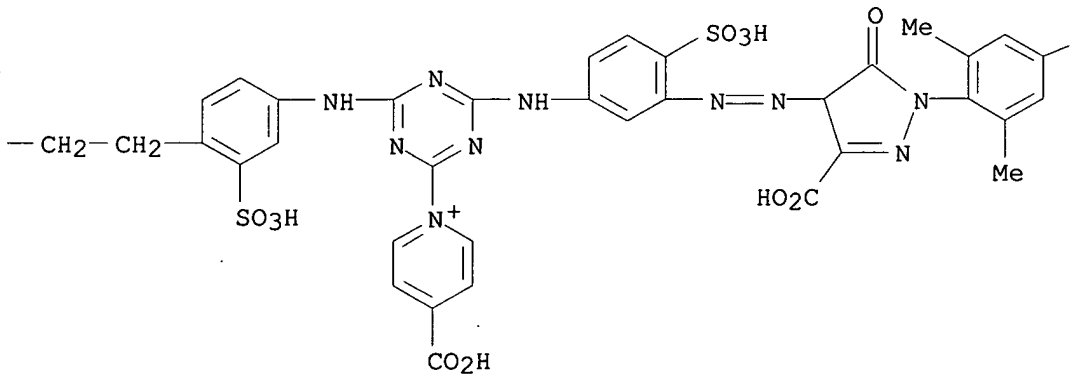
RN 108469-73-4 HCAPLUS
CN Pyridinium, 1,1'-[1,2-ethanediylbis[(3-sulfo-4,1-phenylene)imino[6-[[3-[[3-carboxy-1-(2,6-dimethyl-4-sulfophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

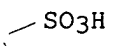


●2 Cl⁻

PAGE 1-B

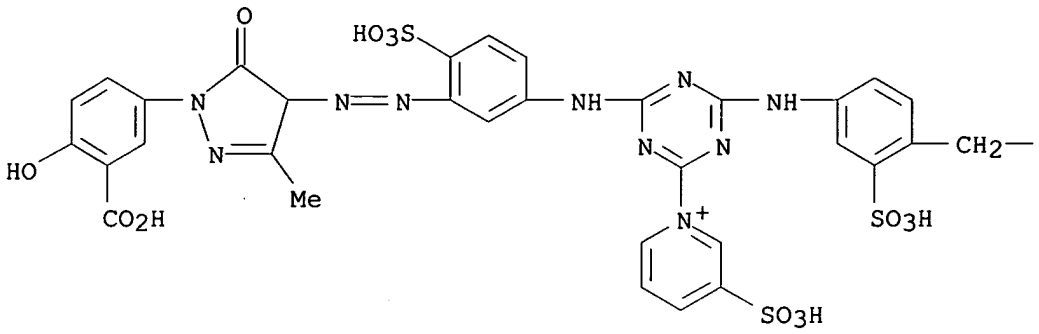


PAGE 1-C



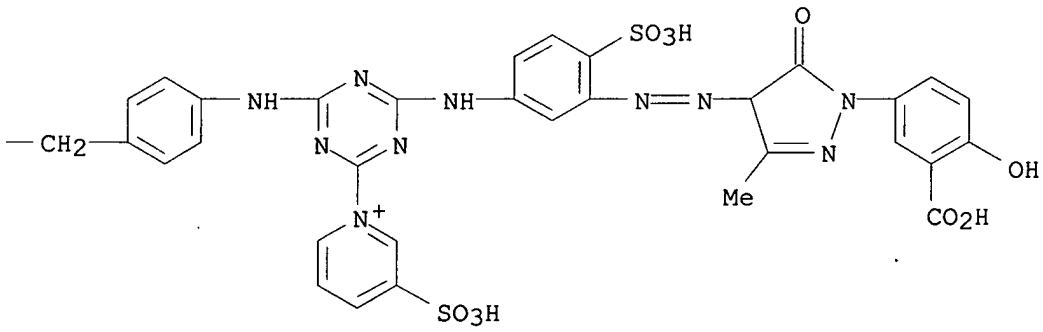
RN 108470-64-0 HCAPLUS
CN Pyridinium, 1-[4-[[3-[[1-(3-carboxy-4-hydroxyphenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[[4-[2-[4-[[4-[[3-[[1-(3-carboxy-4-hydroxyphenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(3-sulfopyridinio)-1,3,5-triazin-2-yl]amino]phenyl]ethyl]-3-sulfophenyl]amino]-1,3,5-triazin-2-yl]-3-sulfo-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



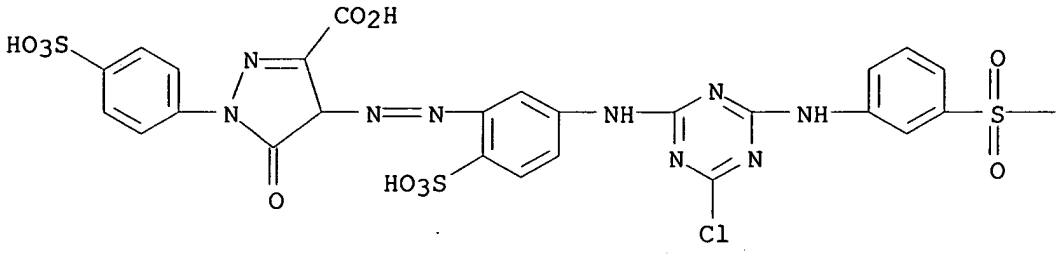
●2 Cl^-

PAGE 1-B



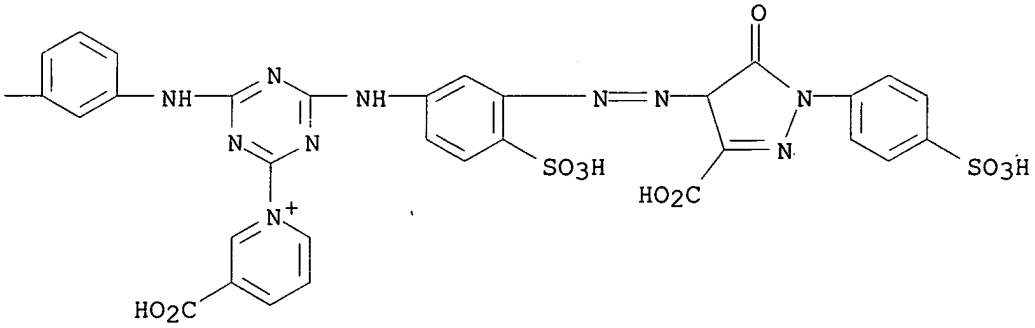
RN 108507-09-1 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[[3-[[3-[[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-chloro-1,3,5-triazin-2-yl]amino]phenyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]-, chloride (9CI) (CA INDEX NAME)

PAGE 1-A



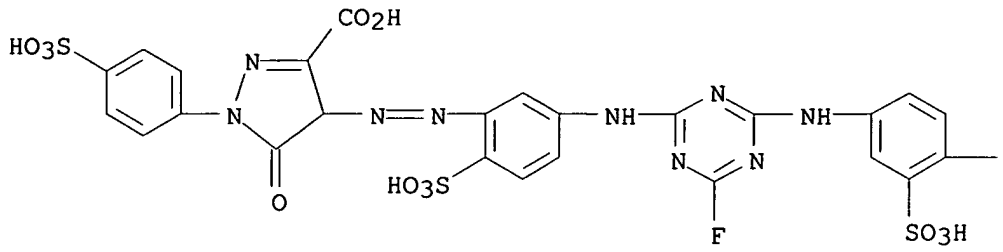
● Cl^-

PAGE 1-B



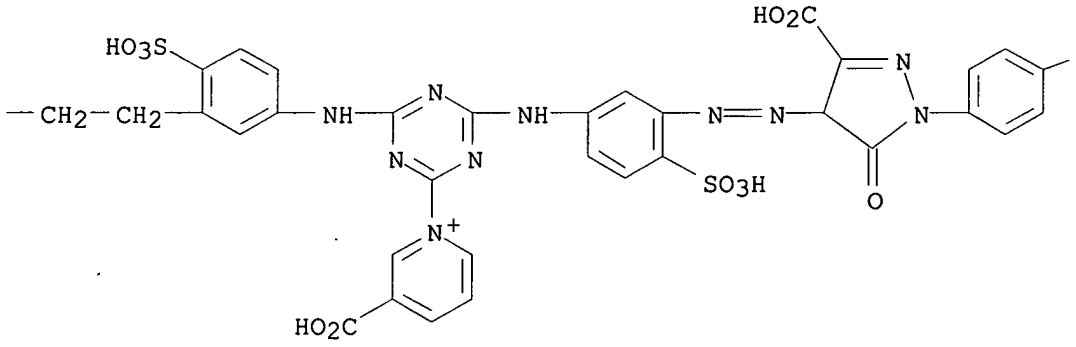
RN 108507-10-4 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[[3-[2-[4-[[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-fluoro-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]ethyl]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, fluoride (9CI) (CA INDEX NAME)

PAGE 1-A

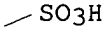


● F^-

PAGE 1-B

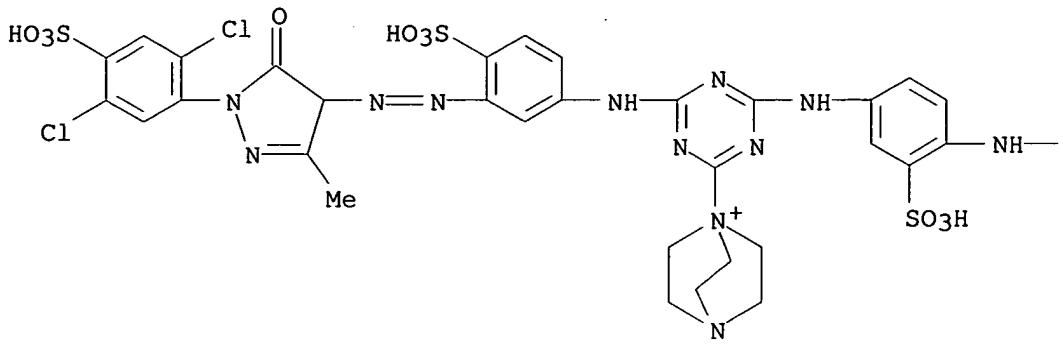


PAGE 1-C



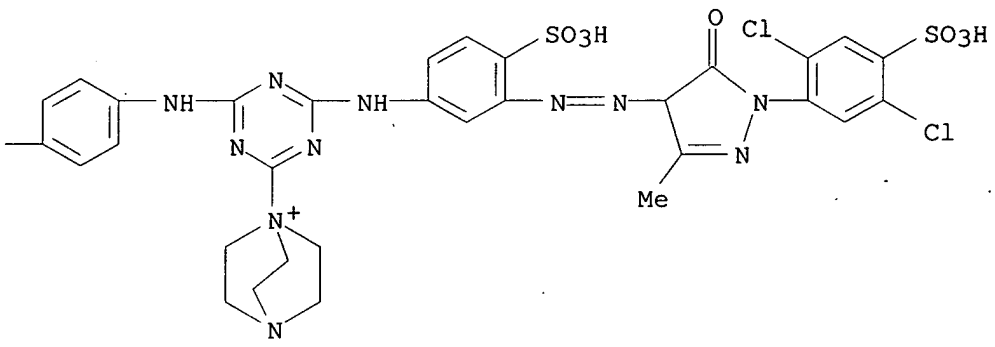
RN 108507-11-5 HCAPLUS
CN 4-Aza-1-azoniabicyclo[2.2.2]octane, 1-[4-[[4-[[4-[[4-(4-aza-1-azoniabicyclo[2.2.2]oct-1-yl)-6-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]amino]phenyl]amino]-3-sulfophenyl]amino]-6-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



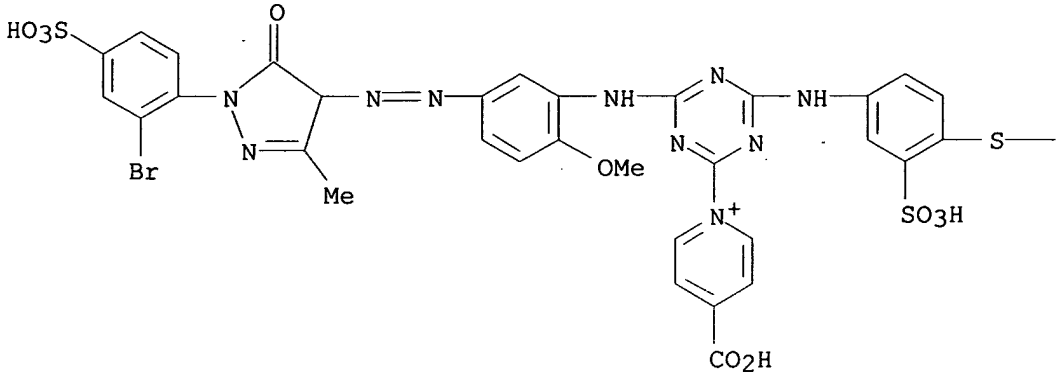
●2 Cl⁻

PAGE 1-B



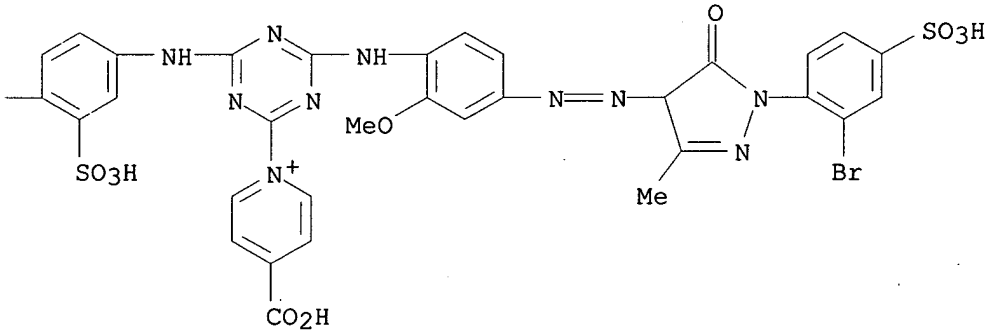
RN 108507-12-6 HCAPLUS
CN Pyridinium, 1,1'-[thiobis[(3-sulfo-4,1-phenylene)imino[6-[[4-[[1-(2-bromo-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-2-methoxyphenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-carboxy-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



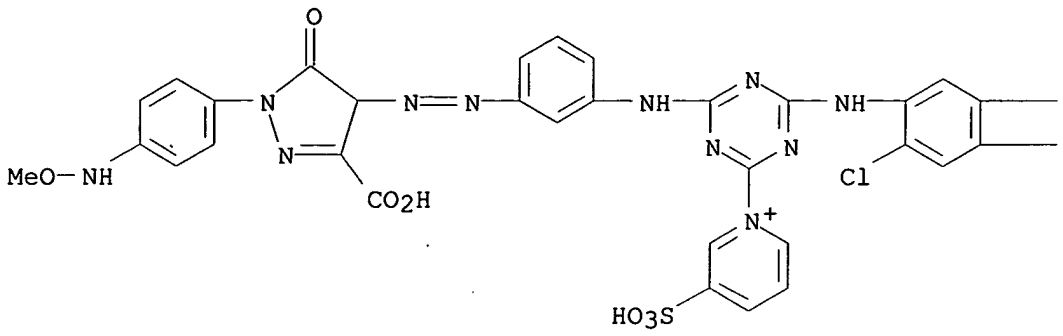
●2 Cl⁻

PAGE 1-B



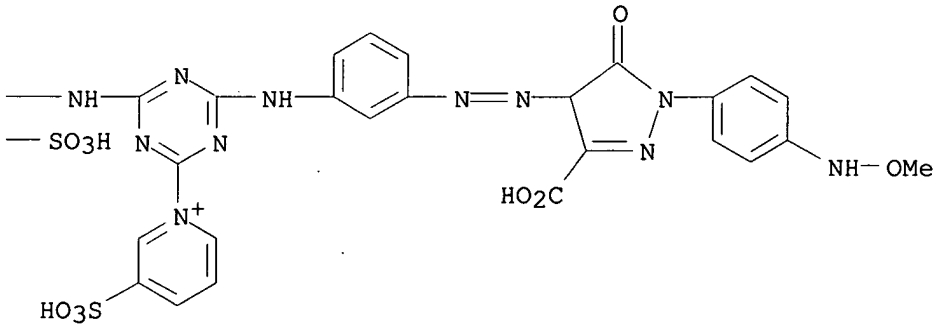
RN 108507-13-7 HCAPLUS
CN Pyridinium, 1,1'-[(4-chloro-6-sulfo-1,3-phenylene)bis[imino[6-[[3-[[3-carboxy-4,5-dihydro-1-[4-(methoxyamino)phenyl]-5-oxo-1H-pyrazol-4-yl]azo]phenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-sulfo-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



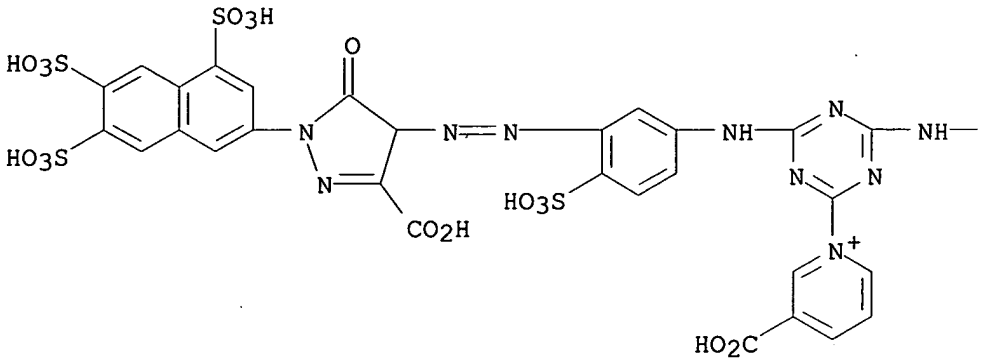
●2 Cl⁻

PAGE 1-B



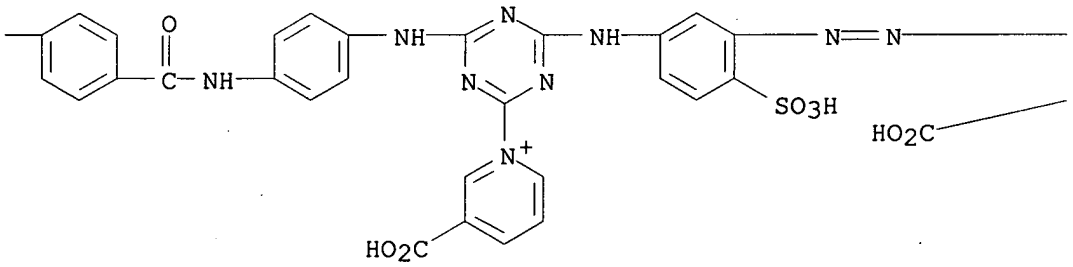
RN 108507-14-8 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4,6,8-trisulfo-2-naphthalenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[[4-[[4-[[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4,6,8-trisulfo-2-naphthalenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(3-carboxypyridinio)-1,3,5-triazin-2-yl]amino]benzoyl]amino]phenyl]amino]-1,3,5-triazin-2-yl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

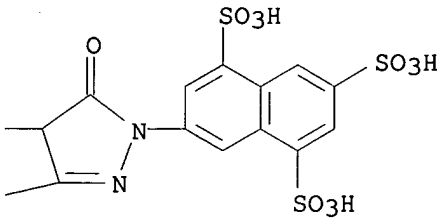


●2 Cl⁻

PAGE 1-B



PAGE 1-C

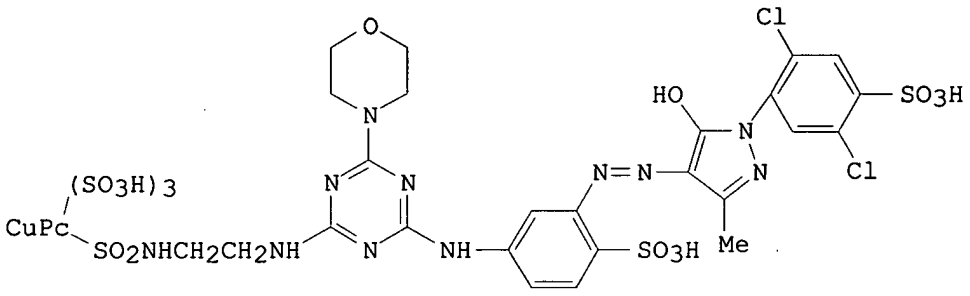


L16 ANSWER 19 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:592866 HCAPLUS
DN 105:192866
TI Water-soluble phthalocyanine compounds
IN Yamamura, Shigeo; Hirasawa, Yutaka

PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61087759	A2	19860506	JP 1984-185451	19840906
	JP 04011672	B4	19920302		
PRAI	JP 1984-185451		19840906		

GI



I

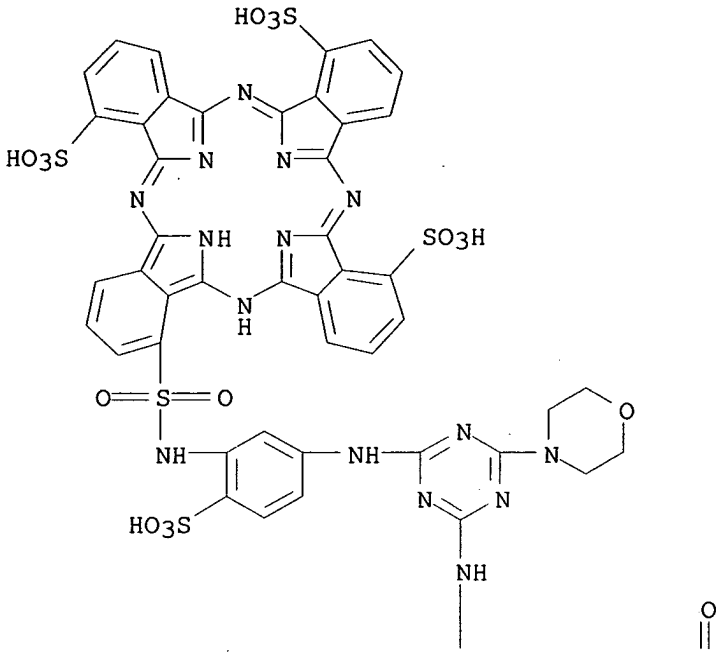
AB Water-soluble phthalocyanine (Pc) compds. useful for coloring glass were prepared Thus, cyanuric chloride was condensed with 2,4-diaminobenzenesulfonic acid, diazotized, coupled with 1-(2,5-dichloro-4-sulfophenyl)-3-methyl-5-pyrazolone, and condensed with CuPc(SO3H)3SO2NHCH2CH2NH2 and then morpholine to give I. Toluene 69, 2-(dimethylamino)ethyl methacrylate 30, and AIBN 1 part were heated at 80° for 5 h, and 50 parts of the resulting polymer solution was treated with 15 parts (chloromethyl)styrene for 16 h, dissolved in 260 parts 2-ethoxyethanol, treated with 16 parts Irgacure 651, spin-coated 1 μ thick on a KBM 503-coated glass plate, and UV-cured. The coated glass was immersed in a 0.05% aqueous I at pH 4 for 20 min to give a bright green optical glass.

IT **104359-61-7D**, aluminum complexes **104453-55-6**
104972-58-9 104972-61-4 104972-63-6
104972-68-1 104972-69-2 104972-70-5
104994-22-1 105015-26-7 105015-27-8
RL: TEM (Technical or engineered material use); USES (Uses)
(**dyes**, for colored coatings for optical glass, manufacture of)

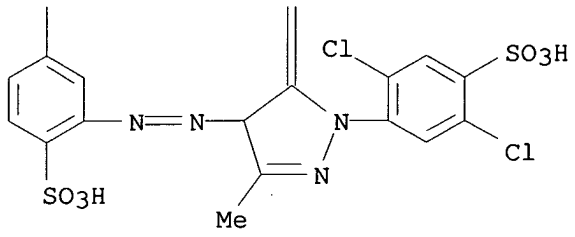
RN 104359-61-7 HCAPLUS

CN 29H,31H-Phthalocyanine-1,8,15-trisulfonic acid, 22-[[[5-[[4-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

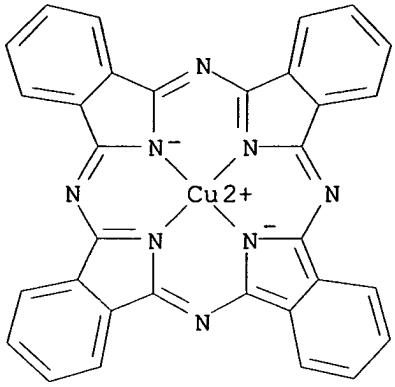


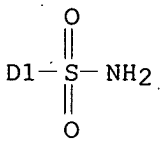
PAGE 2-A



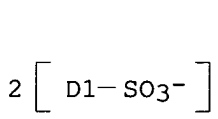
RN 104453-55-6 HCAPLUS
CN Cuprate(6-), [C-(aminosulfonyl)-C-[[[5-[[4-[[3-[[1-(1,5-disulfo-2-naphthalenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]sulfonyl]-29H,31H-phthalocyanine-C,C-disulfonato(8-)-N29,N30,N31,N32]-, hexahydrogen (9CI) (CA INDEX NAME)

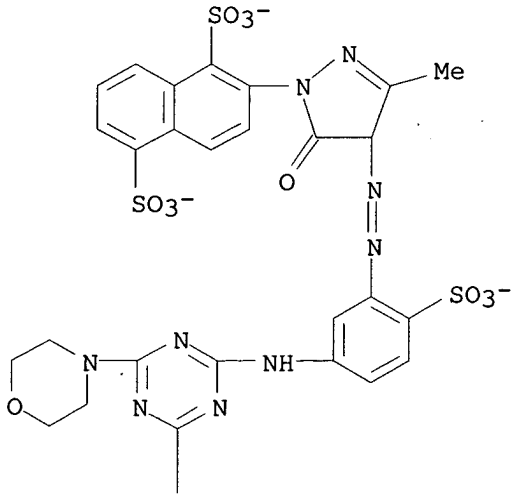
PAGE 1-A



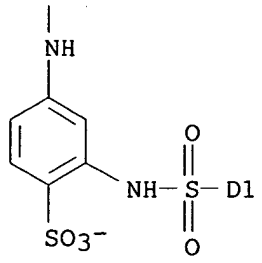


PAGE 2-A





PAGE 3-A

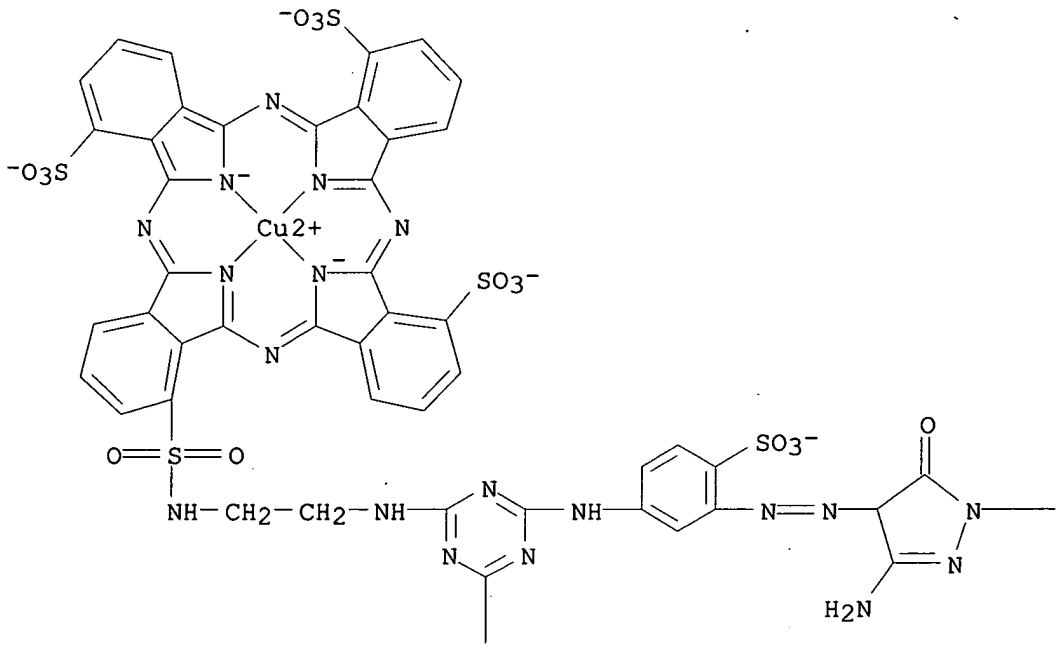


● 6 H^+

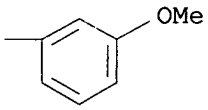
RN 104972-58-9 HCAPLUS

CN Cuprate(4-), [22-[[[2-[[4-[[3-[[3-amino-4,5-dihydro-1-(3-methoxyphenyl)-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]ethyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(6-)-N29,N30,N31,N32]-, tetrahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

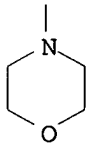
PAGE 1-A



PAGE 1-B



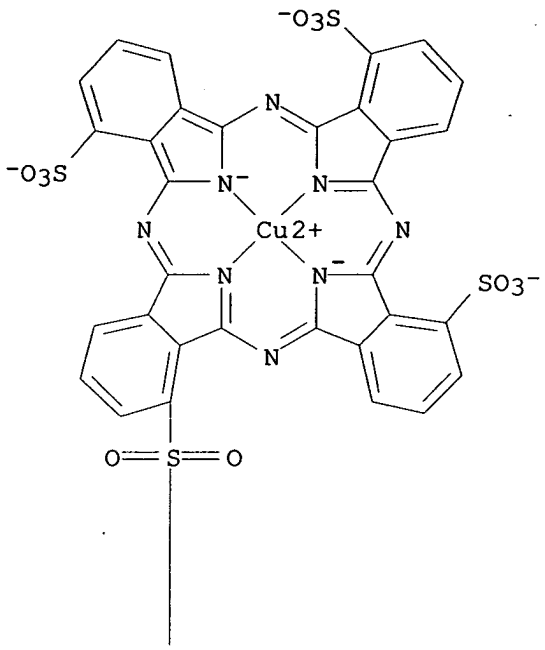
PAGE 2-A



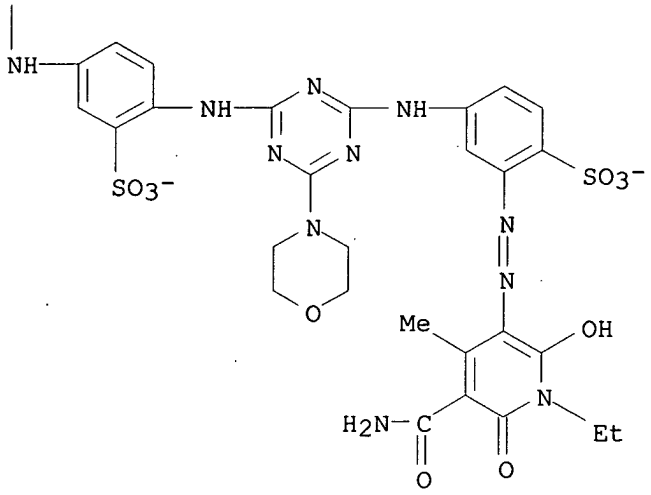
●4 H^+

RN 104972-61-4 HCAPLUS
CN Cuprate(5-), [22-[[[4-[[4-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-3-sulfophenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(7-)-N29,N30,N31,N32]-, pentahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

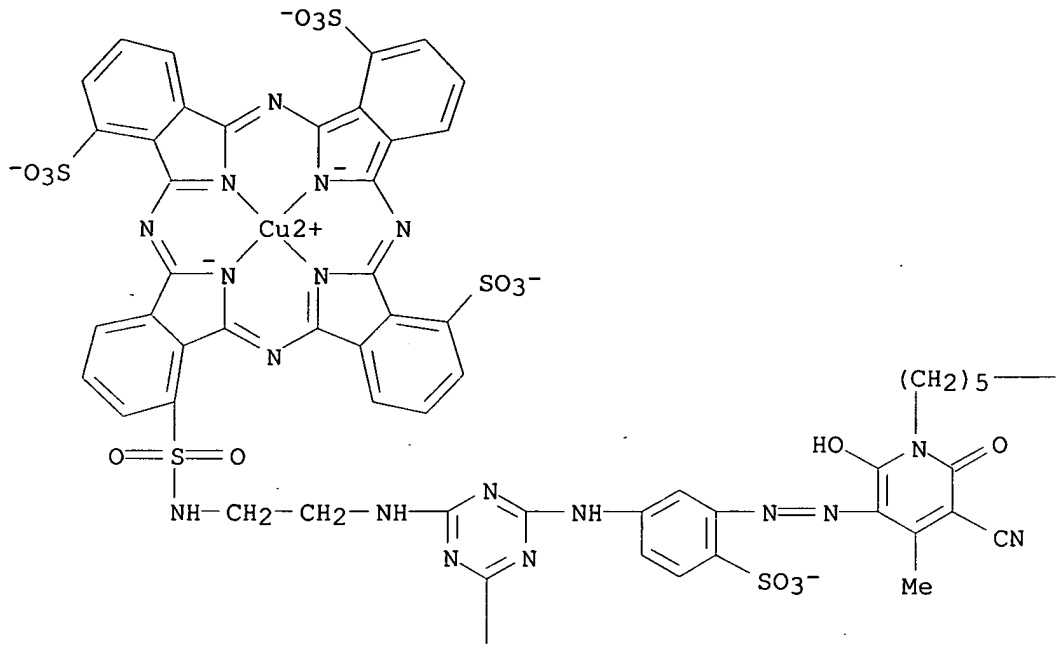


●5 H^+

RN 104972-63-6 HCAPLUS
CN Cuprate(5-), [3-cyano-6-hydroxy-4-methyl-5-[[5-[[4-(4-morpholinyl)-6-[[2-[[(8,15,22-trisulfo-29H,31H-phthalocyanin-1-yl)sulfonyl]amino]ethyl]amino]-

1,3,5-triazin-2-yl]amino]-2-sulfophenyl]azo]-2-oxo-1(2H)-pyridinehexanoato(7-)-N29,N30,N31,N32]-, pentahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

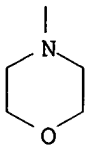
PAGE 1-A



PAGE 1-B

—CO2-

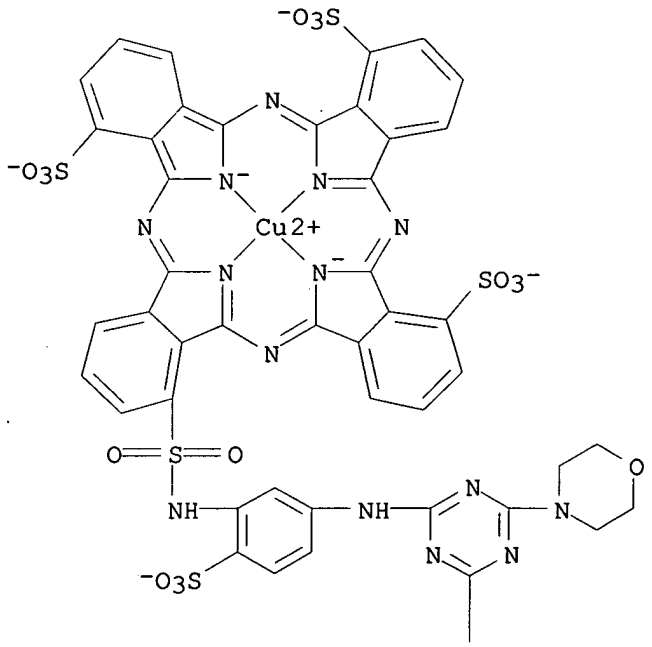
PAGE 2-A



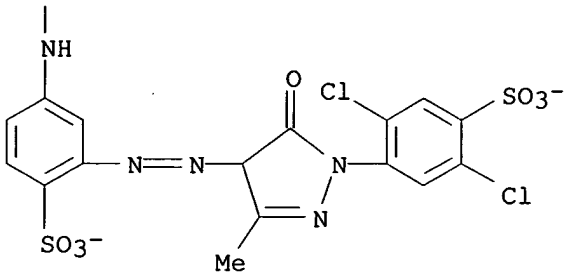
●5 H^+

RN 104972-68-1 HCAPLUS
CN Cuprate(6-), [22-[[[5-[[4-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(8-)-N29,N30,N31,N32]-, hexahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



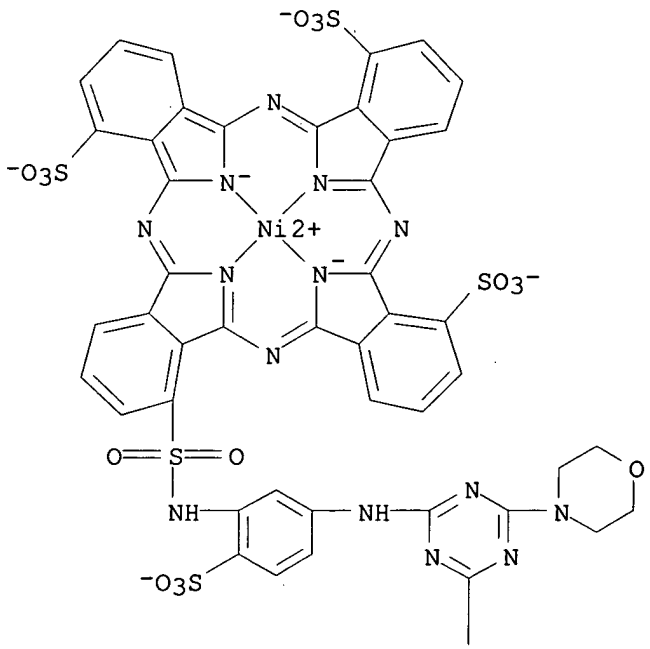
PAGE 2-A



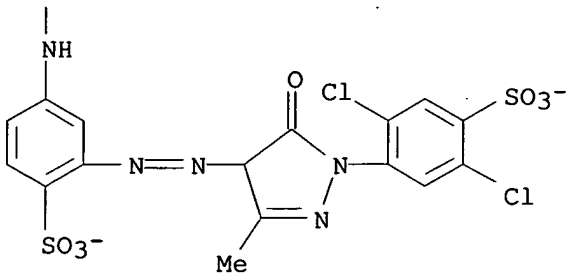
●6 H^+

RN 104972-69-2 HCAPLUS
CN Nickelate(6-), [22-[[[5-[[4-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(8-)-N29,N30,N31,N32]-, hexahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



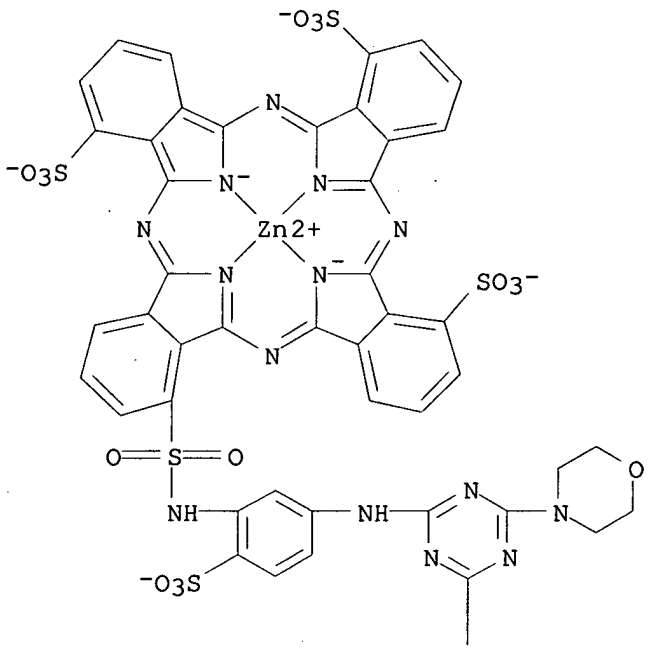
PAGE 2-A



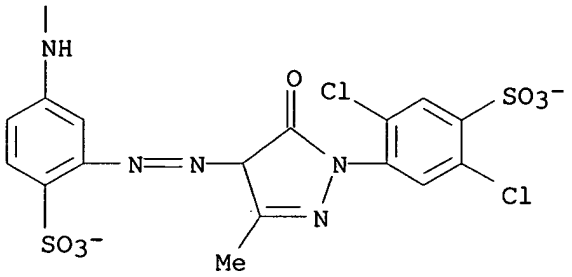
●6 H^+

RN 104972-70-5 HCAPLUS
CN Zincate(6-), [22-[[[5-[[4-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(8-)-N29,N30,N31,N32]-, hexahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



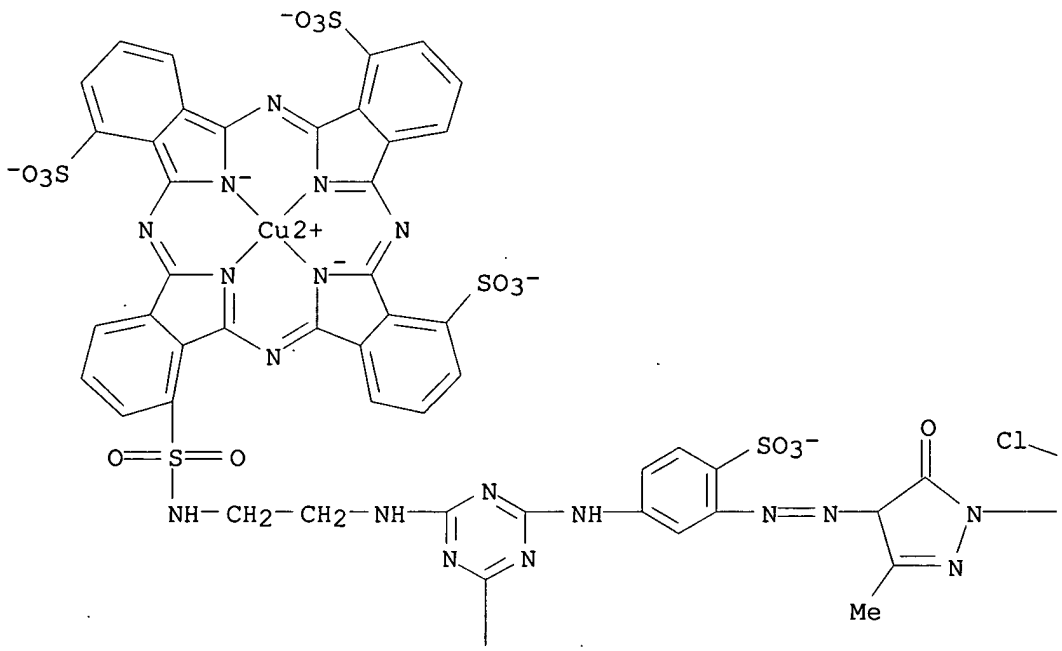
PAGE 2-A



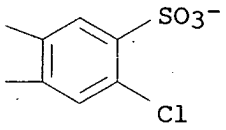
●6 H^+

RN 104994-22-1 HCAPLUS
CN Cuprate(5-), [22-[[[2-[[4-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]ethyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(7-)-N29,N30,N31,N32]-, pentahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

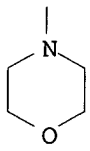
PAGE 1-A



PAGE 1-B



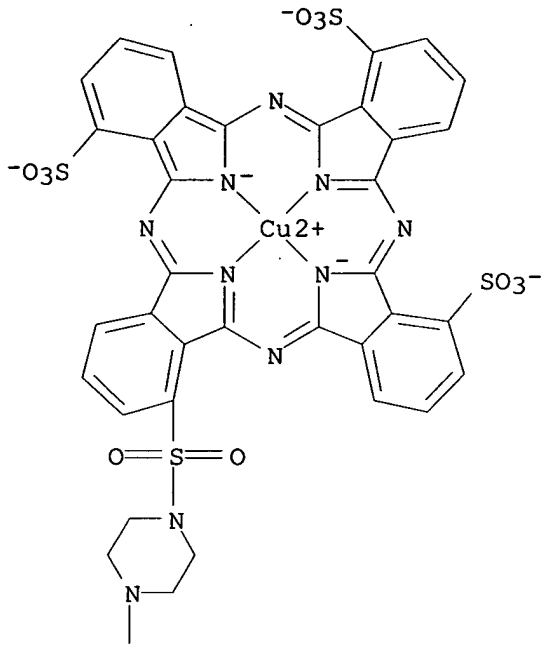
PAGE 2-A



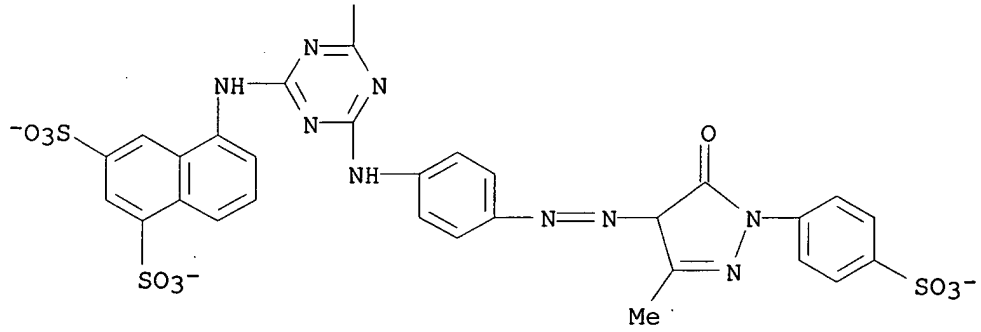
●5 H^+

RN 105015-26-7 HCAPLUS
CN Cuprate(6-), [22-[[4-[4-[[4-[[4,5-dihydro-3-methyl-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]phenyl]amino]-6-[(5,7-disulfo-1-naphthalenyl)amino]-1,3,5-triazin-2-yl]-1-piperazinyl]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(8-)-N29,N30,N31,N32]-, hexahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

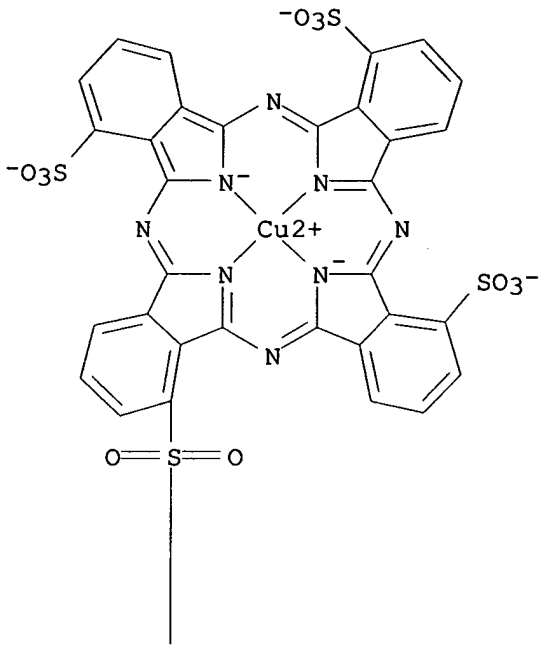


●6 H^+

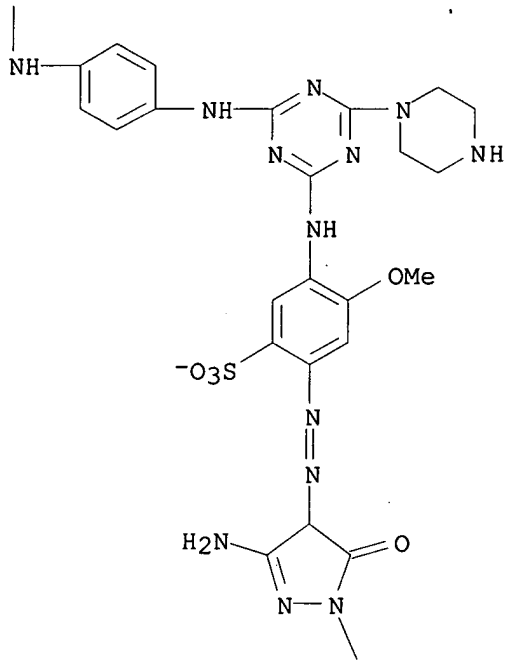
RN 105015-27-8 HCAPLUS

CN Cuprate(4-), [22-[[[4-[[4-[[4-[(3-amino-4,5-dihydro-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-2-methoxy-5-sulfophenyl]amino]-6-(1-piperazinyl)-1,3,5-triazin-2-yl]amino]phenyl]amino]sulfonyl]-29H,31H-phthalocyanine-1,8,15-trisulfonato(6-)-N29,N30,N31,N32]-, tetrahydrogen, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



PAGE 3-A

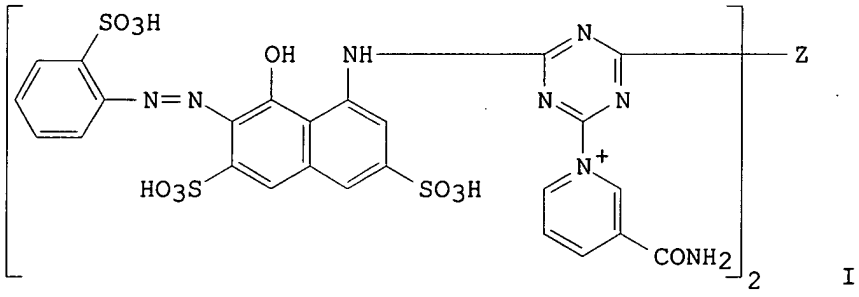
Ph

● 4 H^+

L16 ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:592855 HCAPLUS
DN 105:192855
TI Reactive dyes
IN Shirasaki, Toshitaka; Toda, Junji; Sotokoshi, Teruhito; Kojima, Masayoshi
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61040367	A2	19860226	JP 1984-159236	19840731
PRAI	JP 1984-159236		19840731		

GI



I

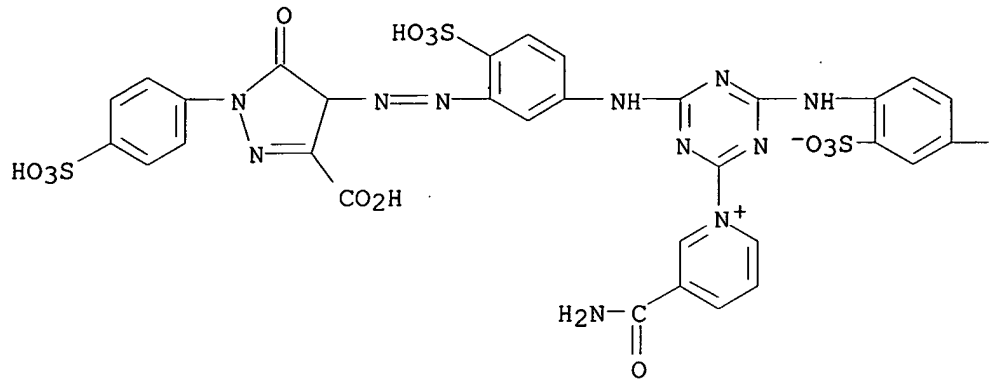
AB Reactive azo dyes containing (aminocarbonylpyridinio)triazine group were prepared and used for dyeing cotton. Thus, 1-amino-8-hydroxynaphthalene-3,6-disulfonic acid was condensed with cyanuric chloride, coupled with diazotized o-anilinesulfonic acid, condensed with p-phenylenediamine, and treated with nicotinamide to give I (Z = p-phenylene), bluish red on cotton.

IT **104701-46-4 104701-47-5 104701-57-7**
104720-21-0 104720-24-3 104720-25-4
RL: TEM (Technical or engineered material use); USES (Uses)
(**dye**, for cotton, manufacture of)

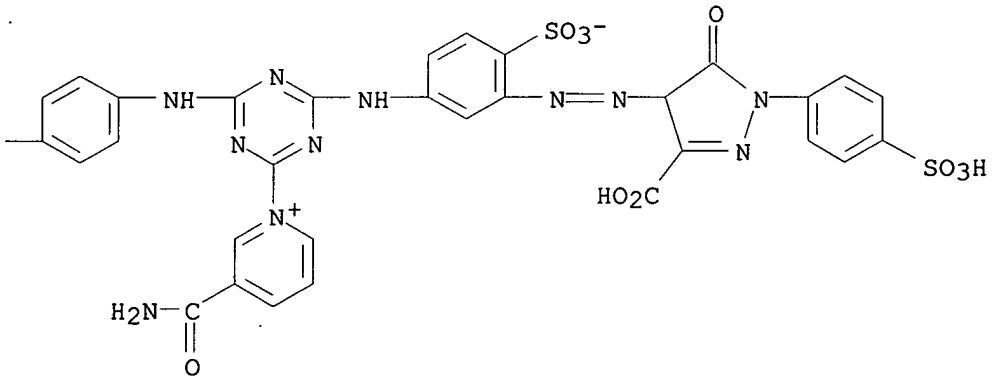
RN 104701-46-4 HCAPLUS
CN Pyridinium, 1,1'-[(3-sulfo[1,1'-biphenyl]-4,4'-diyl)bis[imino[6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-

sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-(aminocarbonyl)-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



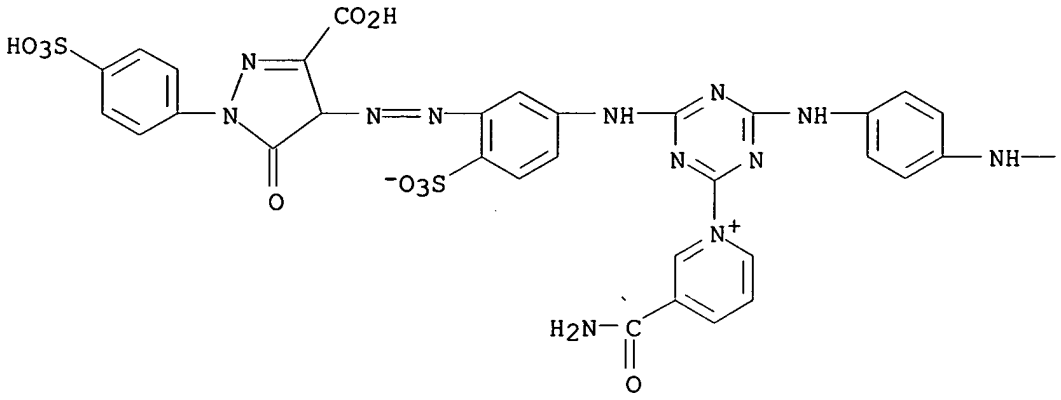
PAGE 1-B



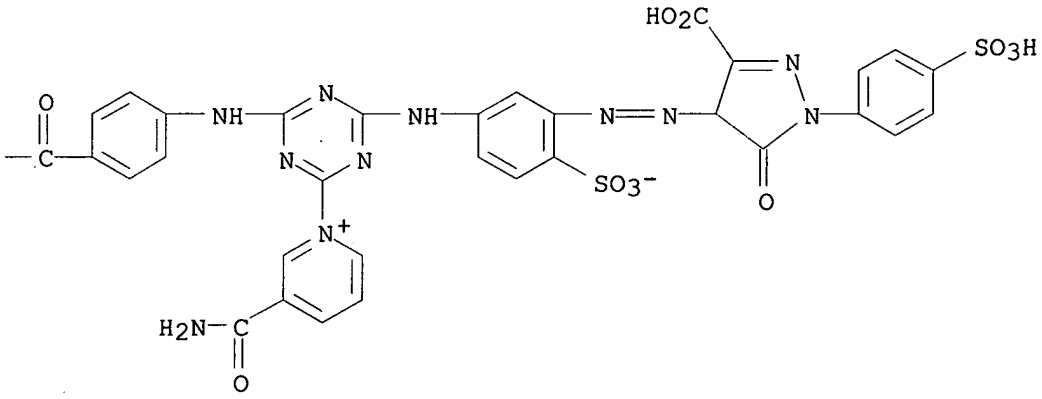
RN 104701-47-5 HCAPLUS

CN Pyridinium, 3-(aminocarbonyl)-1-[4-[[4-[[4-[[4-[[4-[3-(aminocarbonyl)pyridinio]-6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]phenyl]amino]-1,3,5-triazin-2-yl]amino]benzoyl]amino]phenyl]amino]-6-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

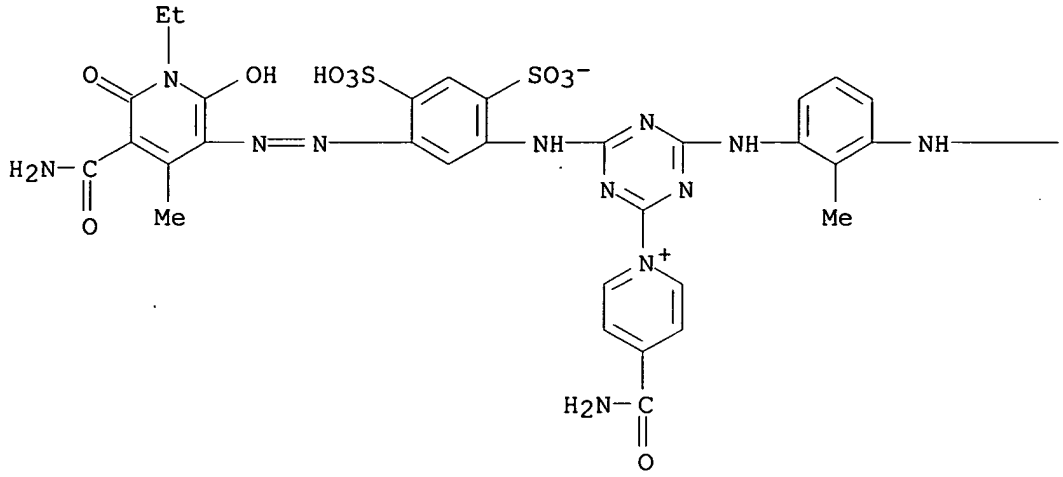


PAGE 1-B

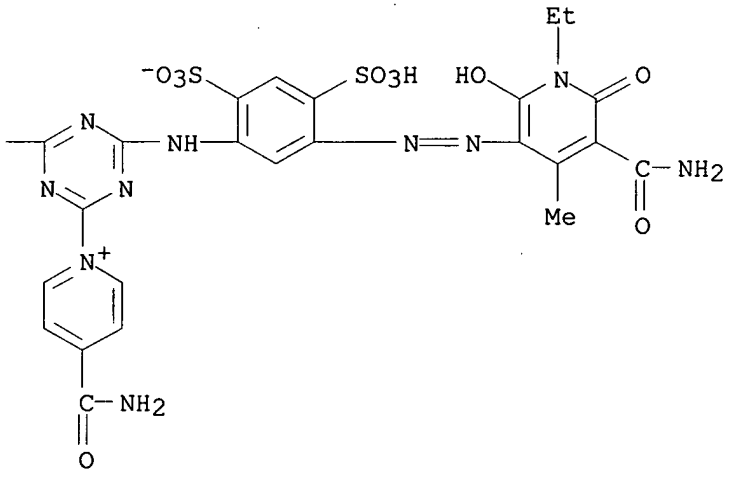


RN 104701-57-7 HCAPLUS
CN Pyridinium, 1,1'-[(2-methyl-1,3-phenylene)bis[imino[6-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[4-(aminocarbonyl)-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

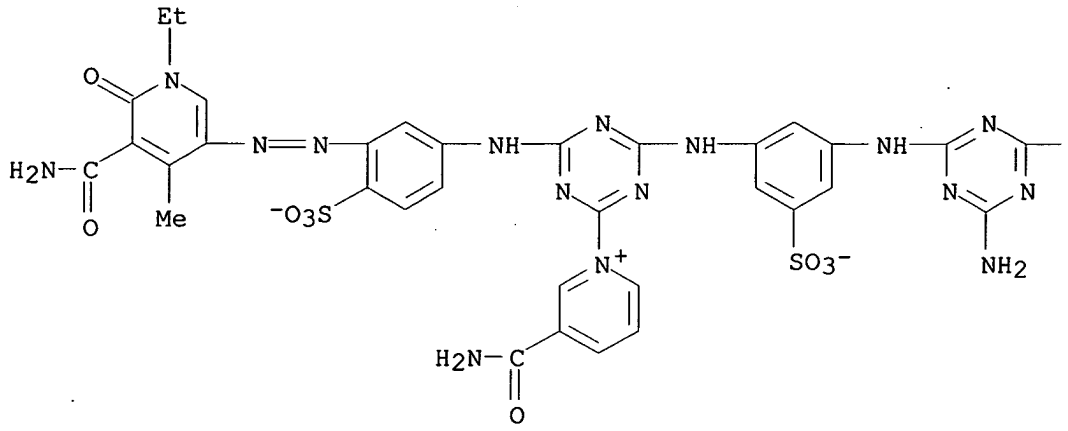


PAGE 1-B

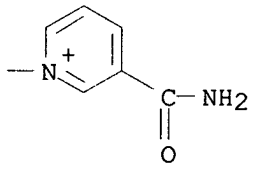


RN 104720-21-0 HCAPLUS
CN Pyridinium, 1-[4-amino-6-[[3-[[4-[[3-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-4-methyl-6-oxo-3-pyridinyl]azo]-4-sulfophenyl]amino]-6-[3-(aminocarbonyl)pyridinio]-1,3,5-triazin-2-yl]amino]-5-sulfophenyl]amino]-1,3,5-triazin-2-yl]-3-(aminocarbonyl)-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

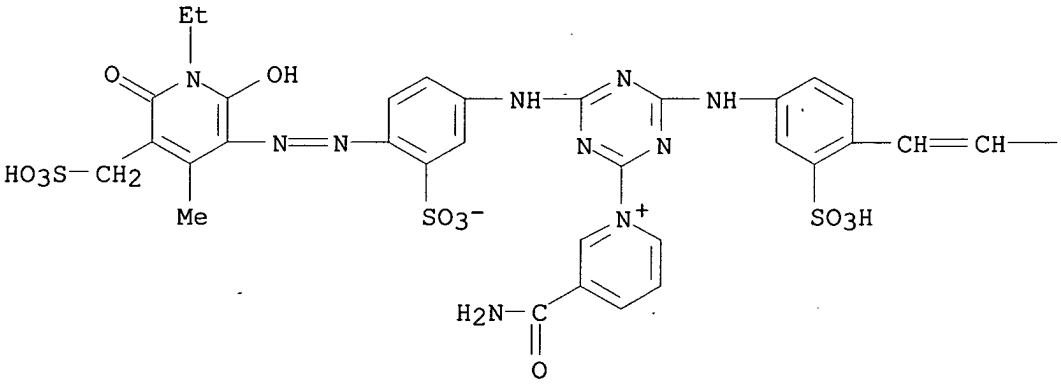


PAGE 1-B

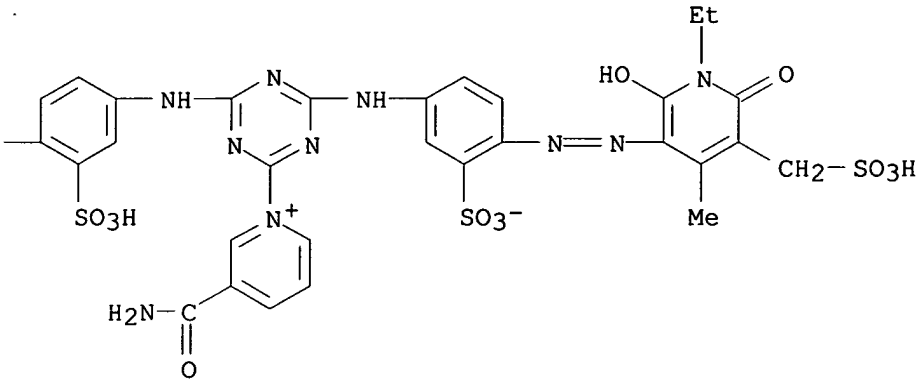


RN 104720-24-3 HCAPLUS
CN Pyridinium, 1,1'-[1,2-ethenediylbis[(3-sulfo-4,1-phenylene)imino[6-[[4-[[1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-5-(sulfomethyl)-3-pyridinyl]azo]-3-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-(aminocarbonyl)-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

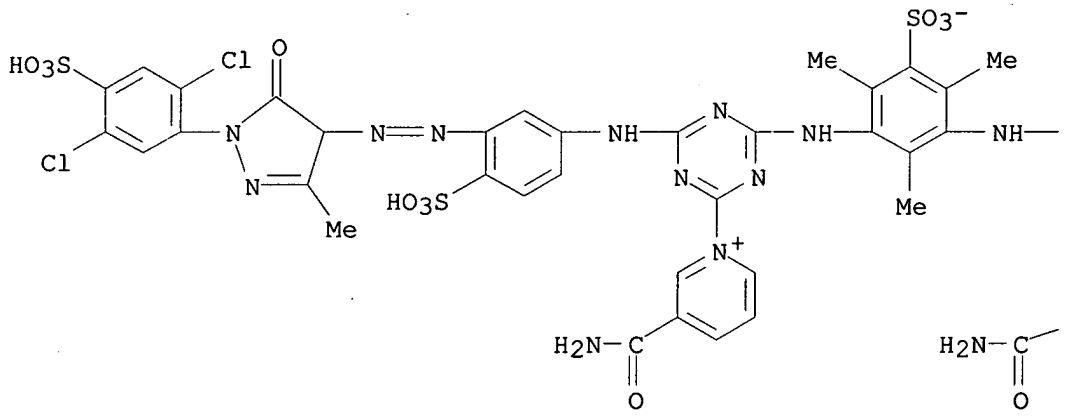


PAGE 1-B

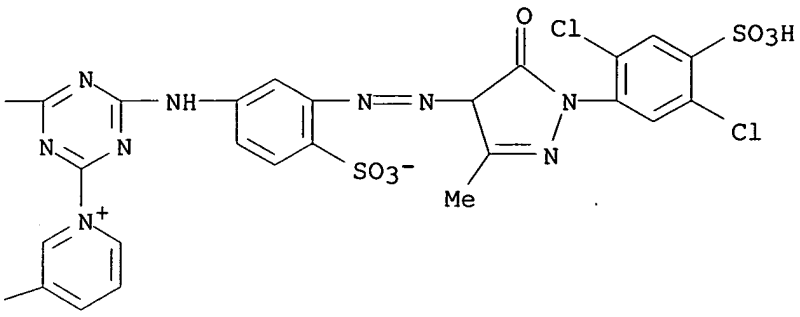


RN 104720-25-4 HCAPLUS
CN Pyridinium, 1,1'-[(2,4,6-trimethyl-5-sulfo-1,3-phenylene)bis[imino[6-[[3-[[1-(2,5-dichloro-4-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-1,3,5-triazine-4,2-diyl]]]bis[3-(aminocarbonyl)-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



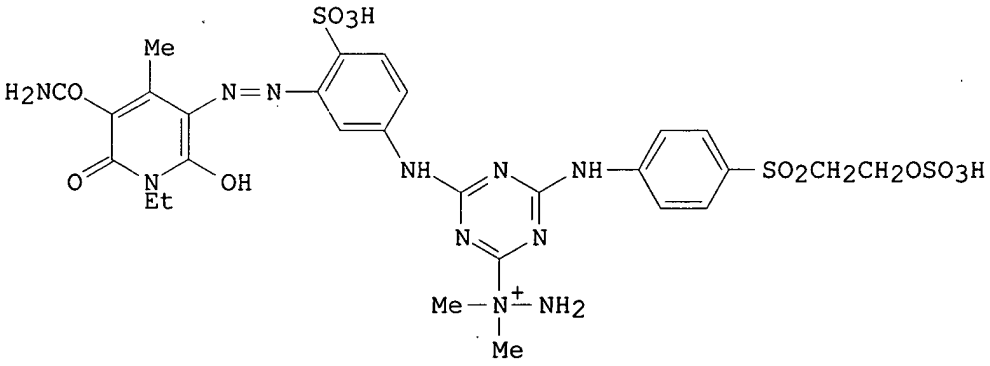
PAGE 1-B



L16 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:592803 HCAPLUS
DN 105:192803
TI Dyeing cellulosic fibers
IN Imada, Kunihiko; Harada, Naoki; Omura, Takashi; Takeshita, Akira
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61047885	A2	19860308	JP 1984-166145	19840808
	JP 06011946	B4	19940216		
PRAI	JP 1984-166145		19840808		

GI



I

AB By use of reactive dyes containing ≥1 each of reactive group for nucleophilic substitution and reactive group for nucleophilic addition reaction and quaternary ammonium group as the leaving group for the reactive group for nucleophilic substitution, cellulosic fibers were dyed

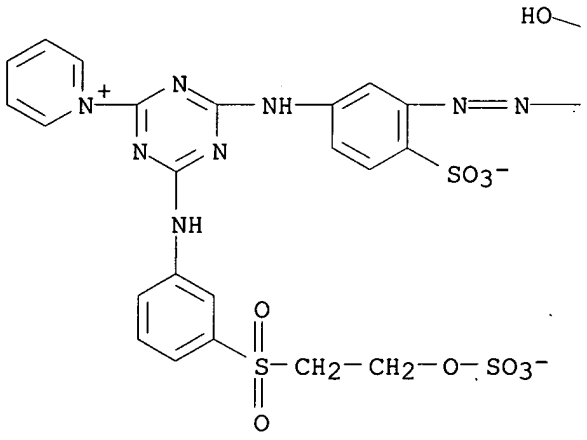
at pH 4-8 and 30-100° and pH 8-14 and 25-90° to give level dyeings with high dye buildup. Thus, in 2000 parts dye bath containing dye of free-acid form I 2, Na2SO4 100, NaH2PO4 4, and Na2HPO4 1 part, 100 parts cotton knit was dyed at 80° for 30 min, cooled to 60°, treated with 40 parts Na2CO3, and heated at 80° for 30 min, followed by usual workup to give a level bright greenish yellow dyeing with good color fastness.

IT **105082-18-6**
RL: USES (Uses)
(**dyeing** by, of cotton)

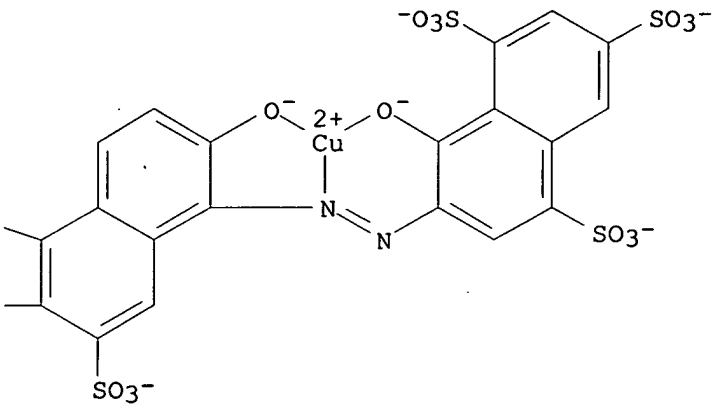
RN 105082-18-6 HCAPLUS

CN Cuprate(5-), [1-[4-[[3-[[1,6-dihydroxy-5-[(1-hydroxy-4,6,8-trisulfo-2-naphthalenyl)azo]-3-sulfo-2-naphthalenyl]azo]-4-sulfophenyl]amino]-6-[[3-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]amino]-1,3,5-triazin-2-yl]pyridiniumato(8-)]-, pentahydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

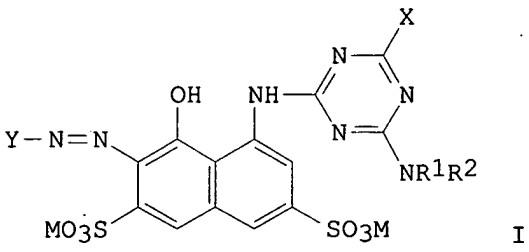


●5 H^+

L16 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:516545 HCAPLUS
DN 105:116545
TI Water-soluble dye
IN Baxter, Anthony Gerard William; Bostock, Stephen Bernard; Greenwood, David
PA Imperial Chemical Industries PLC, UK
SO Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 176195	A2	19860402	EP 1985-305513	19850802
	EP 176195	A3	19880420		
	EP 176195	B1	19910626		
	R: CH, DE, FR, GB, IT, LI				
	US 4703113	A	19871027	US 1985-764999	19850812
	JP 61062562	A2	19860331	JP 1985-185047	19850824
	JP 05079109	B4	19931101		
	US 5118737	A	19920602	US 1990-541077	19900622
PRAI	GB 1984-21551		19840824		
	US 1985-764999		19850812		
	US 1986-932303		19861119		
	US 1988-195396		19880512		

GI



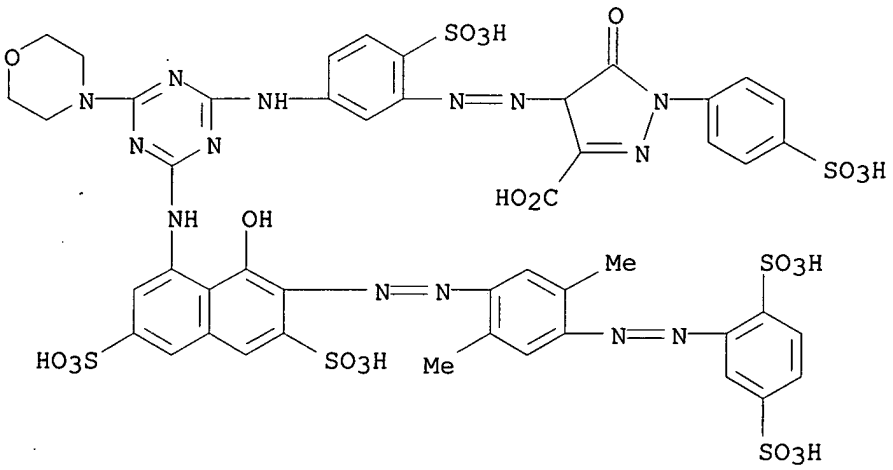
I

AB Water-soluble azo dyes, free from cellulose reactive groups, have the formula I [M = H, NH4, monovalent metal; R1 = (CaH2aO)m(CbH2bO)nH; R2 = H, (CaH2aO)m(CbH2bO)nH, or NR1R2 = morpholino; X = NR1R2, NR3R4, azo chromophore residue; R3, R4 = H, alkyl, aryl; Y = diazo component residue; a, b = 1-8; m = 1-10; n = 0-9] and contain 1 or ≥3 azo groups. Inks derived from these dyes are suitable for use in jet-printing applications. I are prepared by diazotizing YNH2, coupling with 4,5-HO(H2N)C10H4(SO3H)2-2,7 under alkaline conditions, condensing the resultant dye with cyanuric chloride, treating the resulting dichlorotriazine with XH, and treating the monochlorotriazine formed with HNR1R2. Thus, aniline-2,5-disulfonic acid was diazotized and coupled with cresidine. This dye was rediazotized and added to a solution of acetyl-H-acid and the resultant disazo dye reacted with cyanuric chloride. The solution was screened and treated with J Acid, followed by ethanolamine and diazotized orthanilic acid to yield I [M = K, R1 = CH2CH2OH, R2 = H, X = 5-hydroxy-7-sulfo-6-[(2-sulfophenyl)azo]-2-naphthylamino, Y = 4-[(2,5-disulfophenyl)azo]-2-methoxy-5-methylphenyl].

IT **104281-13-2P**
RL: PREP (Preparation)
(manufacture of, as **dye** for jet-printing inks)

RN 104281-13-2 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4-[[5-[[4-[[7-[[4-[(2,5-disulfophenyl)azo]-2,5-dimethylphenyl]azo]-8-hydroxy-3,6-disulfo-1-naphthalenyl]amino]-6-(4-morpholinyl)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]azo]-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-, heptasodium salt (9CI) (CA INDEX NAME)



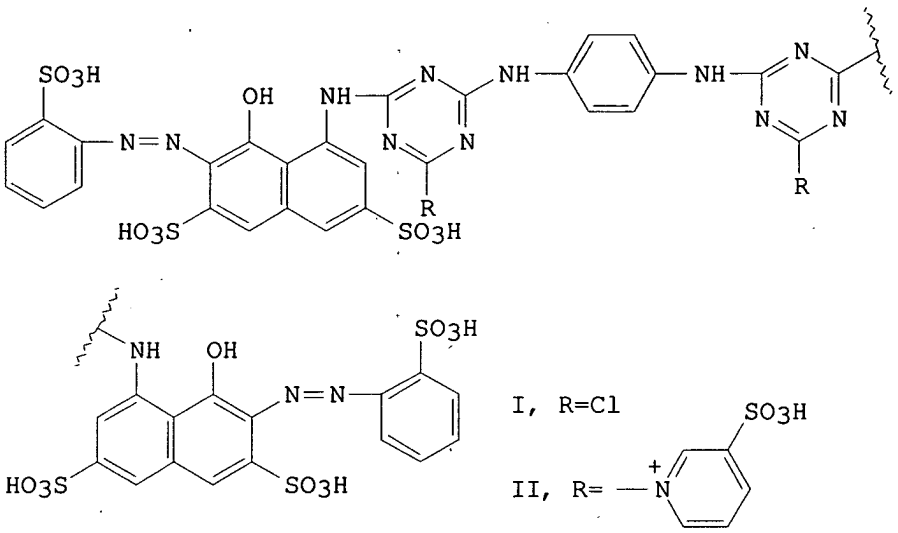
●7 Na

L16 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:462207 HCAPLUS
DN 105:62207
TI Dyeing of cellulose-containing fibers with reactive azo dyes
IN Orita, Ryuzo; Kojima, Masayoshi; Ogawa, Eiichi; Watanabe, Shigeyuki; Yamamura, Shigeo
PA Nippon Kayaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61012987	A2	19860121	JP 1984-131993	19840628
PRAI	JP 1984-131993		19840628		

GI



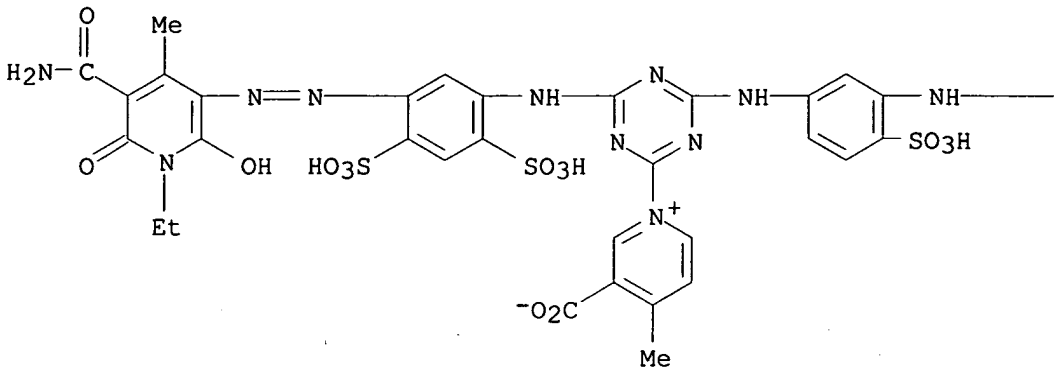
AB Reactive dyes containing, ≥1 s-triazinyl group substituted with quaternary ammonium group-containing substituent (excluding 3-carboxypyridinio) can be used for dip dyeing cellulosic fibers from an aqueous bath at a low temperature (100-150°) in the absence of acid binders. This process is especially effective in dyeing cotton blends with mixed dyes by one-bath-one-step dyeing. Thus, I in water was stirred with a solution of pyridine-3-sulfonic acid in aqueous NaOH at 80° for 16 h to give II, fast bluish red on cotton.

IT **103446-35-1**
RL: TEM (Technical or engineered material use); USES (Uses)
(**dye**, for cotton, manufacture of)

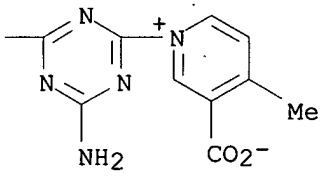
RN 103446-35-1 HCAPLUS

CN Pyridinium, 1-[4-amino-6-[[5-[[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-(3-carboxy-4-methylpyridinio)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]-3-carboxy-4-methyl-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



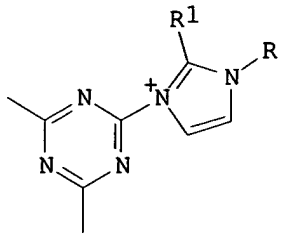
PAGE 1-B



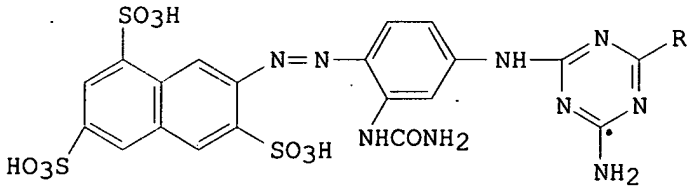
L16 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:462206 HCAPLUS
DN 105:62206
TI Reactive dyes
IN Omura, Takashi; Morimitsu, Toshihiko; Kayane, Yutaka; Sawamoto, Hirokazu; Takeshita, Akira; Harada, Naoki
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61007358	A2	19860114	JP 1984-126876	19840620
	JP 07023455	B4	19950315		
PRAI	JP 1984-126876		19840620		

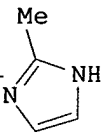
GI



I



II, R=Cl

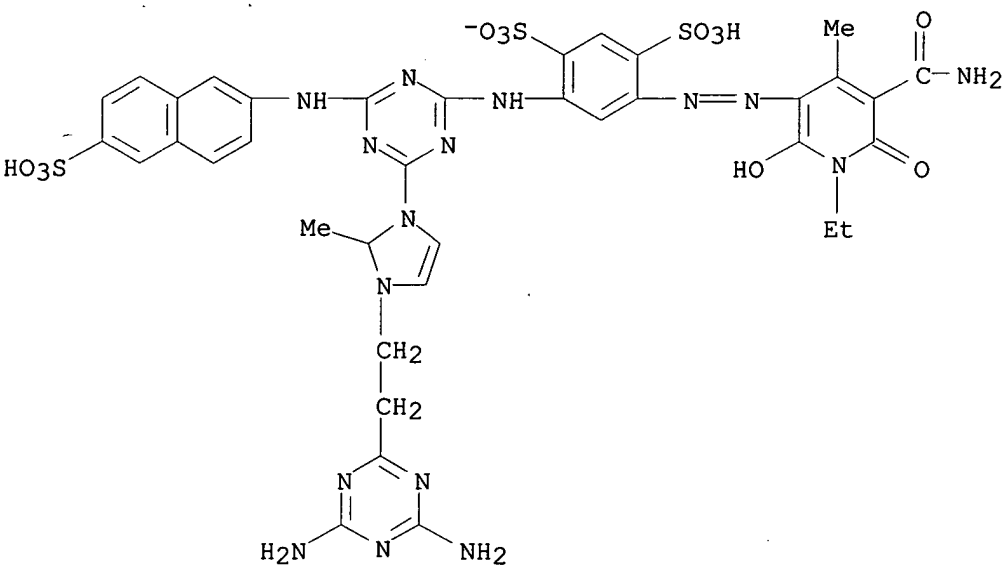
III, R= 

AB Compds. containing ≥1 fiber-reactive group I [R, R1 = H, (un)substituted C1-20 hydrocarbon group) were prepared and used for dyeing cotton with excellent fastness and buildup properties. Thus, II in water was treated with 2-methylimidazole, adjusted to pH 4.0-4.5, stirred at 80 °C overnight, and salted to give III, golden yellow on cotton.

IT **103460-27-1**
RL: TEM (Technical or engineered material use); USES (Uses)
(**dye**, for cotton, manufacture of)

RN 103460-27-1 HCAPLUS

CN 1H-Imidazolium, 1-[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-[(6-sulfo-2-naphthalenyl)amino]-1,3,5-triazin-2-yl]-3-[2-(4,6-diamino-1,3,5-triazin-2-yl)ethyl]-2-methyl-, inner salt (9CI) (CA INDEX NAME)

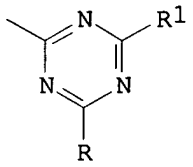


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

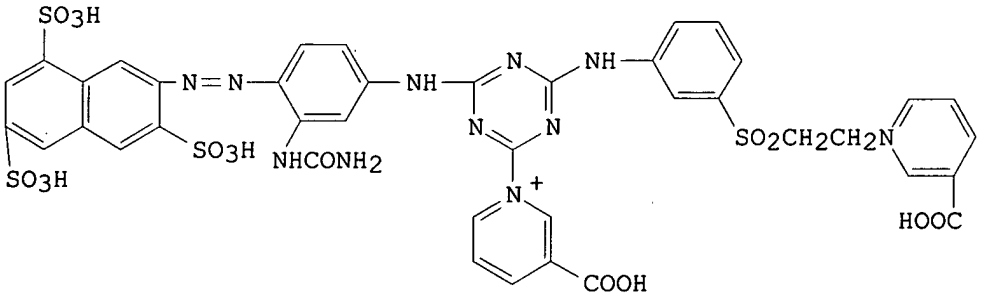
L16 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:408027 HCAPLUS
DN 105:8027
TI Ink compositions for ink-jet printing
IN Ikeo, Masahide; Nakatsuka, Kyoharu
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60226575	A2	19851111	JP 1984-82305	19840424
	JP 06006684	B4	19940126		
PRAI	JP 1984-82305		19840424		

GI



I



II

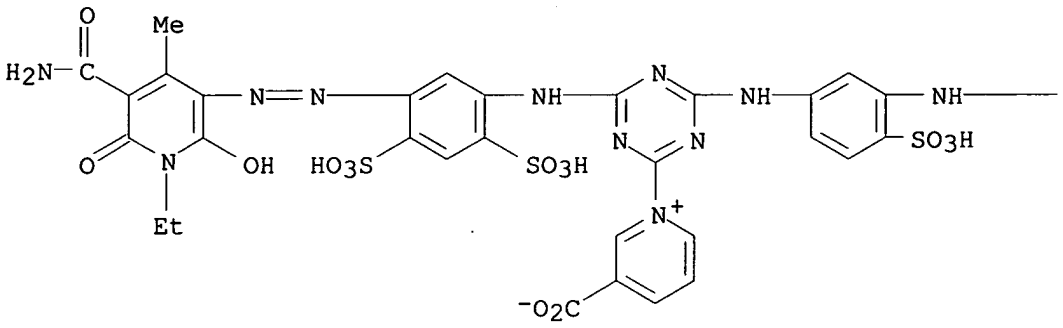
AB Ink compns. with long storage life, continuous jet printability, and giving a clearly printed product comprise H2O, hydrophilic organic solvent, and reactive dyes containing I (R = leaving group bonded by N, S, or O; R1 = substituent which does not react with cellulose or substituent containing functional groups which react in the presence of acid binder) and/or SO2CH2CH2R2 (R2 = halo, leaving group bonded by N or S). Thus, II 5, sulfolane 2, diethylene glycol Me Et ether 15, ethylene glycol 10, triethanolamine 10, urea 2, and H2O 56 parts were mixed and filtered and the filtrate was deaerated and neutralized to give an ink composition which could be jet printed continuously without clogging the nozzle and gave dark and vivid prints with excellent resistance to light and water.

IT **102770-42-3**
RL: USES (Uses)
(**dye**, for inks for ink-jet printing)

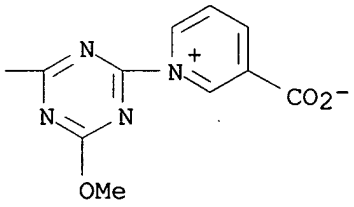
RN 102770-42-3 HCAPLUS

CN Pyridinium, 1-[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-[[3-[[4-(3-carboxypyridinio)-6-methoxy-1,3,5-triazin-2-yl]amino]-4-sulfophenyl]amino]-1,3,5-triazin-2-yl]-3-carboxy-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



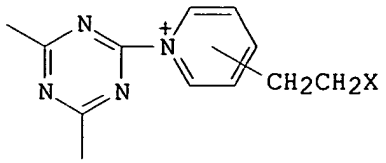
PAGE 1-B



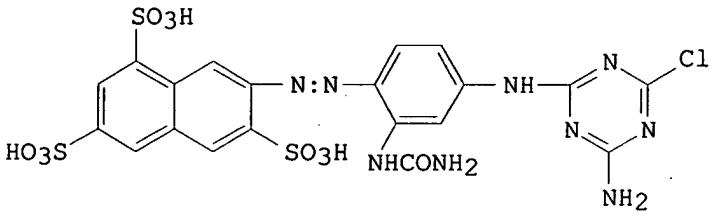
L16 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:226327 HCAPLUS
DN 104:226327
TI Dyeing and printing of fibrous materials with triazine compounds
IN Omura, Takashi; Kaneya, Yutaka; Takahashi, Sho; Miyamoto, Tetsuya; Takeshita, Akira; Harada, Naoki; Otake, Katsumasa
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60208366	A2	19851019	JP 1984-66574	19840402
	JP 05054511	B4	19930812		
PRAI	JP 1984-66574		19840402		

GI



I



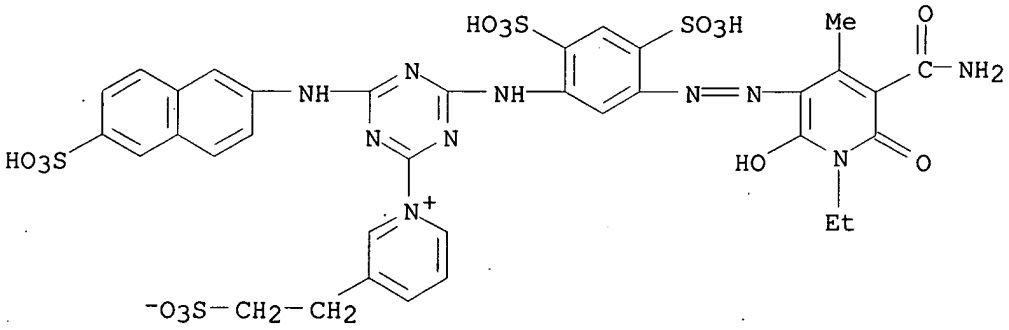
II

AB Dyes are prepared which contain fiber-reactive groups I, where X = OH, sulfo, or sulfato groups. Thus, II reacted with γ-(2-hydroxyethyl)pyridine to give the corresponding I-containing dye, which was used to dye cotton and cotton-polyester blends.

IT **102199-10-0**
RL: MSC (Miscellaneous)
(**dyes**, fiber-reactive)

RN 102199-10-0 HCAPLUS

CN Pyridinium, 1-[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-[(6-sulfo-2-naphthalenyl)amino]-1,3,5-triazin-2-yl]-3-(2-sulfoethyl)-, inner salt (9CI) (CA INDEX NAME)

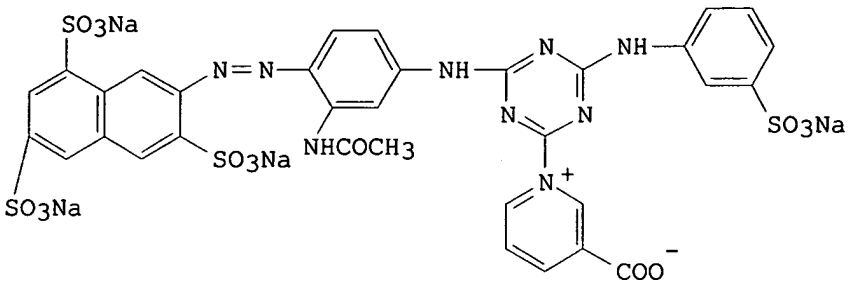


L16 ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:188153 HCAPLUS
DN 104:188153
TI Reactive dye compositions
IN Kaneya, Yutaka; Omura, Takashi; Takahashi, Sho; Miyamoto, Tetsuya; Takeshita, Akira; Harada, Naoki; Otake, Katsumasa
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60208368	A2	19851019	JP 1984-66573	19840402
PRAI	JP 1984-66573		19840402		

GI



I

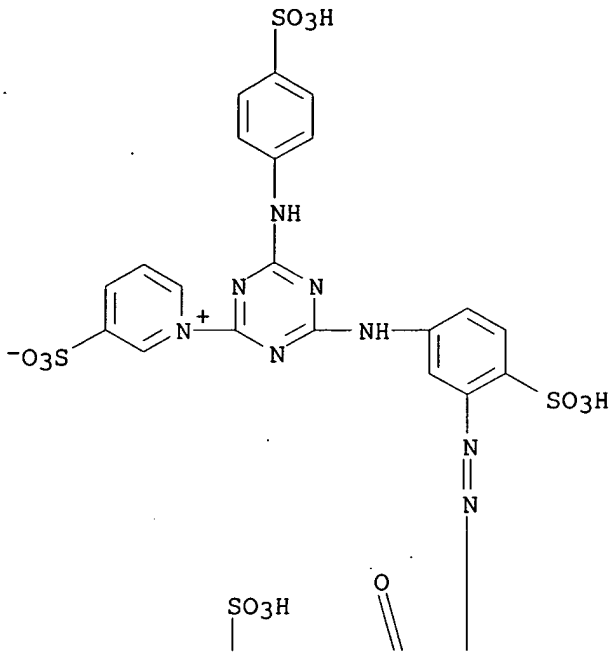
AB The compns. contain reactive dyes having ≥1 s-triazinyl group bearing a substituted pyridino group, and 2-80% (based on the dyes) pH buffers, and have pH 4-9 when mixed with 2000% water. Thus, a solution containing I, NaH2PO4, and Na2CO3 was spray dried, stored 1 mo at 60°, then redissolved and used in dyeing. The I concentration in the bath, and the color of the dyed fabric, were the same as those obtained using the freshly prepared I composition A dried I composition without the buffer showed only 50% of the initial I concentration when redissolved after storage.

IT **101948-53-2**
RL: USES (Uses)
(reactive **dyes**, containing buffers, for improved storage stability)

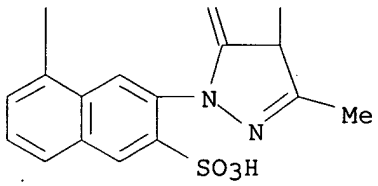
RN 101948-53-2 HCAPLUS

CN Pyridinium, 1-[4-[[3-[[1-(4,8-disulfo-2-naphthalenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[(4-sulfophenyl)amino]-1,3,5-triazin-2-yl]-3-sulfo-, inner salt, tetrasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



●4 Na

L16 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:131447 HCAPLUS
DN 104:131447
TI Dyeing cellulose fiber materials
IN Imada, Kunihiko; Otake, Katsumasa; Omura, Takashi; Takeshita, Akira
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 60181374 A2 19850917 JP 1984-31132 19840220
JP 05029714 B4 19930506
PRAI JP 1984-31132 19840220
GI

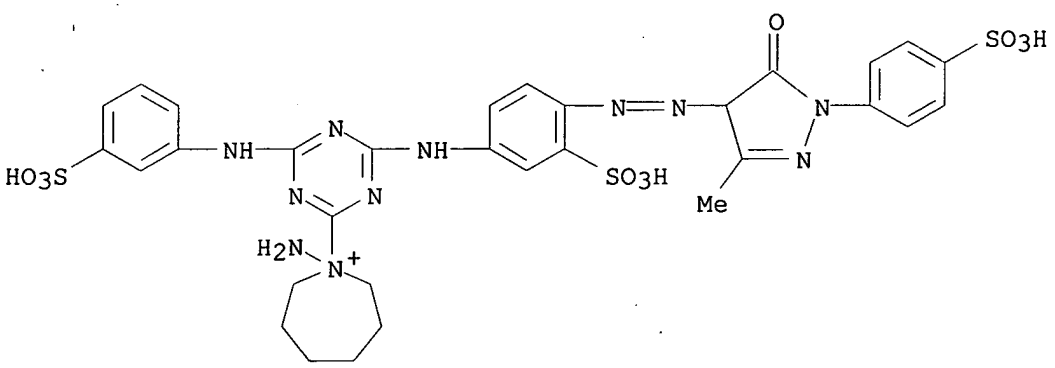
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Cellulose fiber materials can be pad dyed with excellent fastness at 20-140° in weakly acidic or neutral aqueous dye bath by using dyes having hydrophilic groups and ≥1 group I (R = quaternized non-aromatic tertiary amine moiety in which the quaternary N is attached to the triazine C). Thus, a mercerized cotton knit was padded at 20-130° in an aqueous solution (pH 7) containing II, Na2SO4, NaH2PO4, and Na2HPO4, washed, soaped at 95°, washed, and dried to give a reddish yellow fabric with excellent fastness.

IT **100833-83-8**
RL: TEM (Technical or engineered material use); USES (Uses)
(**dye**, for cellulosic fibers, for **dyeing** at weakly acidic or neutral pH, manufacture of)

RN 100833-83-8 HCAPLUS

CN 1H-Azepinium, 1-amino-1-[4-[[4-[[4,5-dihydro-3-methyl-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-3-sulfophenyl]amino]-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]hexahydro-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L16 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:131446 HCAPLUS
DN 104:131446
TI Dyeing cellulose fiber materials
IN Imada, Kunihiko; Otake, Katsumasa; Omura, Takashi; Takeshita, Akira
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60181376	A2	19850917	JP 1984-32213	19840221
	JP 07023587	B4	19950315		
PRAI	JP 1984-32213		19840221		

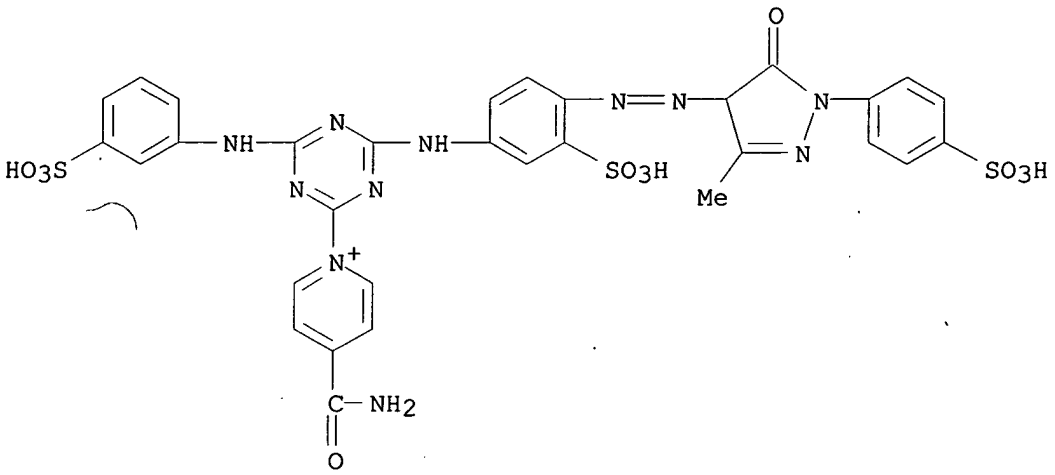
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Cellulose fiber materials can be dyed with excellent fastness at ≤140° in weakly acidic or neutral aqueous dye bath by using dyes having hydrophilic groups and ≥1 group I (R = quaternized aromatic tertiary amine moiety in which the quaternary N is attached to the C of the triazine ring). Thus, a mercerized cotton knit was padded at 20-130° in an aqueous solution (pH 7) containing II, Na2SO4, NaH2PO4, and Na2HPO4, washed, soaped at 95°, washed, and dried to give a reddish yellow fabric with excellent fastness.

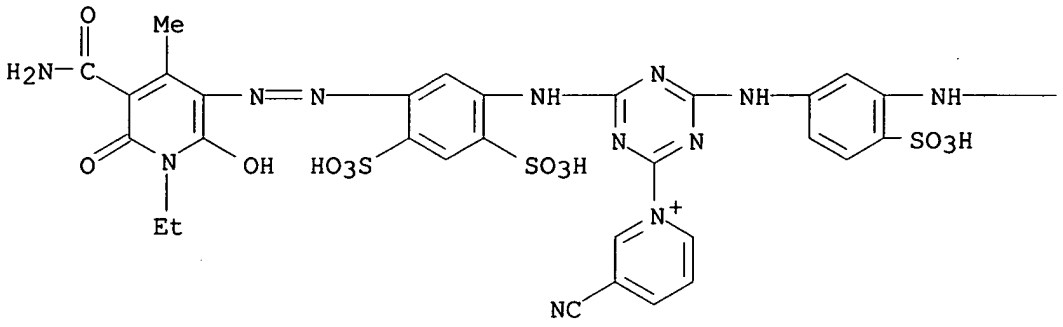
IT **100833-66-7 100846-39-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(**dye**, for cellulosic textiles, for application at weakly acidic or neutral pH, manufacture of)

RN 100833-66-7 HCAPLUS
CN Pyridinium, 4-(aminocarbonyl)-1-[4-[[4-[[4,5-dihydro-3-methyl-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-3-sulfophenyl]amino]-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]- (9CI) (CA INDEX NAME)

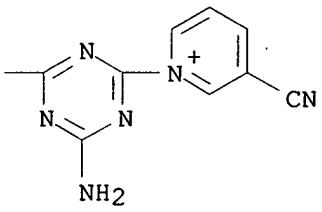


RN 100846-39-7 HCAPLUS
CN Pyridinium, 1-[4-amino-6-[[5-[[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-(3-cyanopyridinio)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]-3-cyano- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L16 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:131410 HCAPLUS
DN 104:131410
TI Dyeing cellulose fiber materials
IN Imada, Kunihiko; Otake, Katsumasa; Omura, Takashi; Takeshita, Akira
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60181373	A2	19850917	JP 1984-31130	19840220
	JP 07023586	B4	19950315		
PRAI	JP 1984-31130		19840220		

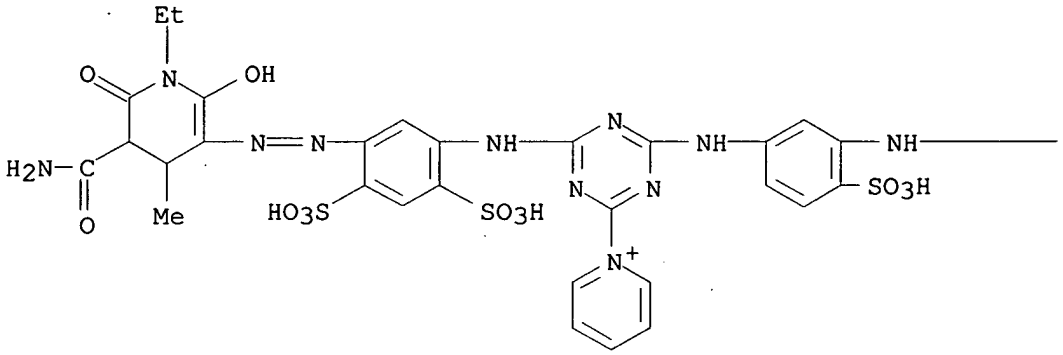
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Cellulose fiber materials can be pad dyed at 20-90° in a weakly acidic or neutral aqueous dye bath by using dyes having hydrophilic groups and ≥1 group I (the pyridinium ring may be substituted). Thus, a cotton knit, scoured and bleached, was padded at 20-80° in an aqueous solution (pH 7) containing II, Na2SO4, NaH2PO4, and Na2HPO4, washed, soaped at 95°, washed, and dried to give a deep blue fabric with excellent wet color fastness.

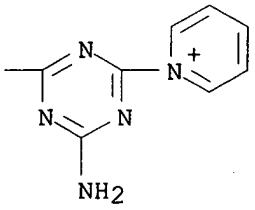
IT **100833-89-4**
RL: USES (Uses)
(**dyeing** of cellulose fibers by, in weakly acidic or neutral **dye** bath)
RN 100833-89-4 HCAPLUS
CN Pyridinium, 1-[4-amino-6-[[5-[[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,4,5,6-tetrahydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-pyridinio-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl^-

PAGE 1-B



L16 ANSWER 31 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1986:131409 HCAPLUS
DN 104:131409
TI Dyeing or printing cellulose fiber materials
IN Imada, Kunihiko; Otake, Katsumasa; Omura, Takashi; Takeshita, Akira
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60181377	A2	19850917	JP 1984-32214	19840221
PRAI	JP 1984-32214		19840221		

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

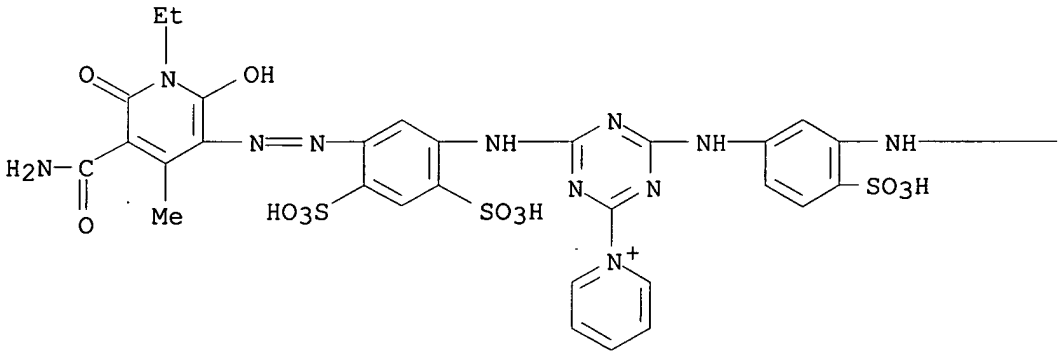
AB Cellulose fiber materials are pad dyed or printed with excellent fastness at ≤140° in acidic-neutral pH region by using dyes containing hydrophilic groups and ≥1 group I (R = quaternized tertiary amine moiety in which the quaternary N is attached to the triazinyl C). Thus, a mercerized cotton fabric was printed with an aqueous paste containing II, Na alginate, and urea, dried at 110°, steamed at 100°, washed, soaped at 95°, washed, and dried to give a deep blue fabric with excellent wet color fastness.

IT **100833-95-2**
RL: USES (Uses)
(**dyeing** and printing of cellulosic fibers by, in acidic-neutral pH region)

RN 100833-95-2 HCAPLUS

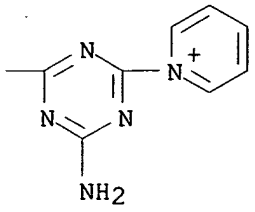
CN Pyridinium, 1-[4-amino-6-[[5-[[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-pyridinio-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



●2 Cl⁻

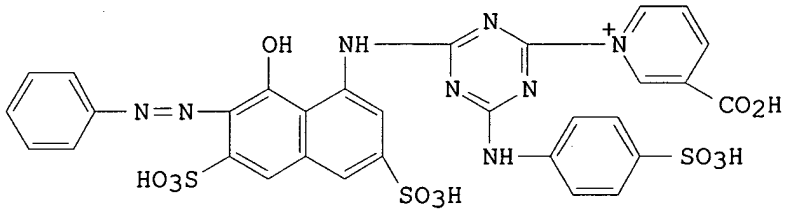
PAGE 1-B



L16 ANSWER 32 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:439769 HCAPLUS
DN 101:39769
TI Dyeing cellulose fibers
PA Nippon Kayaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 59030971	A2	19840218	JP 1982-116127	19820706
PRAI JP 1982-116127		19820706		

GI



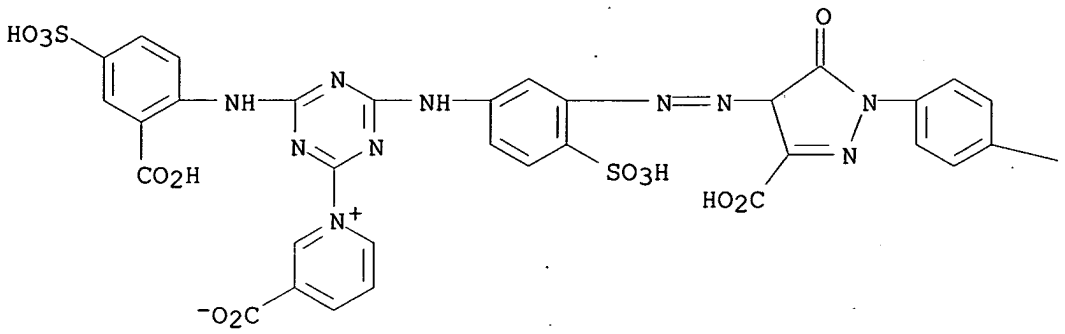
I

AB Cellulose fibers and blends were dyed with high color yield with reactive dyes containing ≥1 s-triazinyl group containing a carboxypyridinio group in the presence of Cl3CCO2Na [650-51-1]. This dyeing system does not flocculate disperse dyes when added for dyeing cellulose-polyester fiber blends. Thus, a cotton broadcloth was padded to wet pickup 70% with a liquor from I [91023-89-1] 40, Cl3CCO2Na 20, urea 150, m-O2NC6H4SO3Na 10, Na alginate 2, and water 778 parts, dried at 100° for 2 min and dry-heated at 150° for 2 min or wet-heated at 150° for 5 min to give a deep red dyeing.

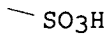
IT **91023-81-3**
RL: USES (Uses)
(**dyeing** with, of cotton, acid binders for, sodium trichloroacetate as)
RN 91023-81-3 HCAPLUS
CN Pyridinium, 3-carboxy-1-[4-[[3-[[3-carboxy-4,5-dihydro-5-oxo-1-(4-sulfophenyl)-1H-pyrazol-4-yl]azo]-4-sulfophenyl]amino]-6-[(2-carboxy-4-

sulfophenyl)amino]-1,3,5-triazin-2-yl]-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

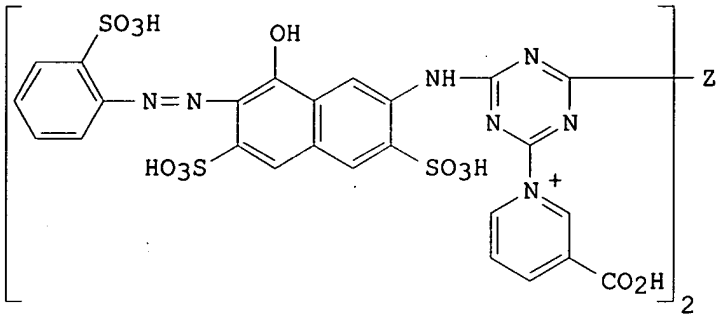


L16 ANSWER 33 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:105043 HCAPLUS
DN 100:105043
TI Dyeing of cellulose fibers or cellulose mixed fibers and dyes used for this process
IN Miyamoto, Masakatsu; Suzuki, Yoshiharu; Ojima, Mayayoshi; Iizuka, Yutaka; Orita, Ryuzo; Matsuo, Tadashi
PA Nippon Kayaku Co., Ltd. , Japan
SO Ger. Offen., 58 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3314663	A1	19831027	DE 1983-3314663	19830422
	DE 3314663	C2	19941020		
	JP 58186682	A2	19831031	JP 1982-69584	19820427
	US 4453945	A	19840612	US 1983-486520	19830419
	GB 2125443	A1	19840307	GB 1983-10726	19830420
	GB 2125443	B2	19860723		
	FR 2525646	A1	19831028	FR 1983-6866	19830426
	FR 2525646	B1	19860711		
	CH 672387	A3	19891130	CH 1983-2233	19830426
	CH 672387	B	19900531		
	CH 672795	A	19891229	CH 1989-369	19830426
	CH 672794	A	19891229	CH 1989-370	19830426
	GB 2160213	A1	19851218	GB 1985-11645	19850508
	GB 2160213	B2	19860723		

	GB 2165852	A1	19860423	GB 1985-12205	19850514
	GB 2165852	B2	19861008		
PRAI	JP 1982-69584		19820427		
	GB 1983-10726		19830420		
	CH 1983-2233		19830426		

GI



I

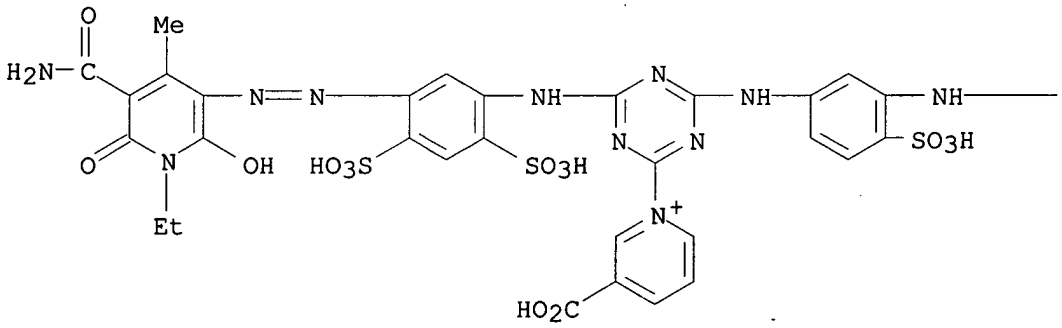
AB Cellulose fibers or their blends are dyed by an exhaustion process using reactive dyes having ≥1 triazine groups containing a m-carboyxpyridinium group or its salt in an aqueous dyebath at pH 4-10 and 95-150°. Thus, a dyebath containing 0.5 part I, Z = 4-NHC6H4NH [88480-47-1] and 1 part C. I. Disperse Red 164 was used to dye a cotton-polyester textile at 140° to give a deeply dyed textile with both components dyed in the same shade with good fastness properties.

IT **88458-64-4**
RL: USES (Uses)
(**dye**, for reactive **dyeing** of cellulosic blend fibers)

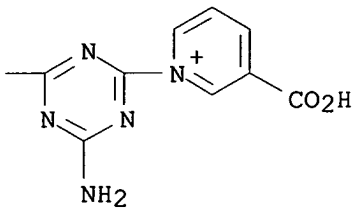
RN 88458-64-4 HCAPLUS

CN Pyridinium, 1-[4-amino-6-[[5-[[4-[[5-[[5-(aminocarbonyl)-1-ethyl-1,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl]azo]-2,4-disulfophenyl]amino]-6-(3-carboxypyridinio)-1,3,5-triazin-2-yl]amino]-2-sulfophenyl]amino]-1,3,5-triazin-2-yl]-3-carboxy- (9CI) (CA INDEX NAME)

PAGE 1-A



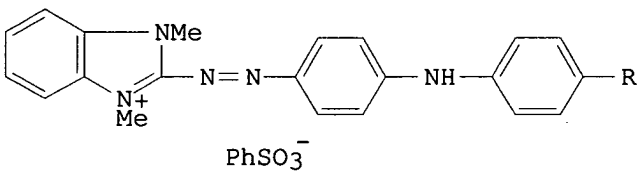
PAGE 1-B



L16 ANSWER 34 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1983:217164 HCAPLUS
DN 98:217164
TI Preparation of 2-[[4-(phenylamino)phenyl]azo]-1,3-dimethylbenzimidazolium salts as cationic dyes for polyacrylonitrile fiber
IN Divaeva, L. N.; Simonov, A. M.; Kolodyazhnaya, S. N.; Troyanov, I. A.; Rachkov, V. S.; Lipinskaya, N. G.; Sogomonova, Raisa A.
PA Rostov State University, USSR
SO U.S.S.R.
From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1982, (45), 101.
CODEN: URXXAF
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI SU 979349	A1	19821207	SU 1981-3320364	19810513
PRAI SU 1981-3320364		19810513		

GI

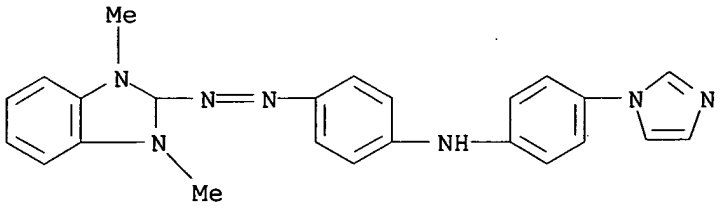


I

AB Title compds. I (R = OMe, NH2, NMe2, OPh, imidazol-1-yl, morpholino) were prepared by treating 2-[(4-methoxyphenyl)azo]-1,3-dimethylbenzimidazolium benzenesulfonate [67708-73-0] with a 2-5 M excess of p-RC6H4NH2 in an organic solvent, e.g., CHCl3 or alc.
IT **85857-10-9P 85857-12-1P**
RL: PREP (Preparation)
(manufacture of, as **dye** for acrylic fibers)
RN 85857-10-9 HCAPLUS
CN 1H-Benzimidazolium, 2-[[4-[[4-(1H-imidazol-1-yl)phenyl]amino]phenyl]azo]-1,3-dimethyl-, benzenesulfonate (9CI) (CA INDEX NAME)

CM 1

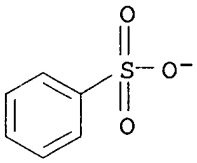
CRN 85857-09-6
CMF C24 H22 N7



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

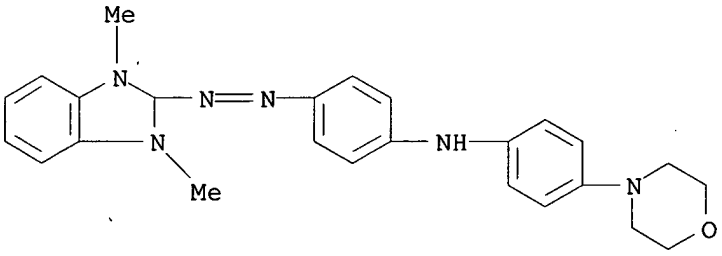
CRN 3198-32-1
CMF C6 H5 O3 S



RN 85857-12-1 HCAPLUS
CN 1H-Benzimidazolium, 1,3-dimethyl-2-[[4-[[4-(4-morpholinyl)phenyl]amino]phenyl]azo]-, benzenesulfonate (9CI) (CA INDEX NAME)

CM 1

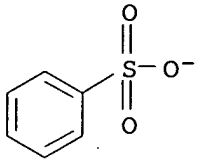
CRN 85857-11-0
CMF C25 H27 N6 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 3198-32-1
CMF C6 H5 O3 S



L16 ANSWER 35 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1972:128802 HCAPLUS
DN 76:128802
TI Fiber-reactive azo dyes
IN Hensel, Hans R.; Weissauer, Hermann
PA Badische Anilin- & Soda-Fabrik AG
SO Ger. Offen., 20 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2033279	A	19720113	DE 1970-2033279	19700704
PRAI	DE 1970-2033279		19700704		

AB Two fiber-reactive compds. [I and II (R = Q)], **dyeing** cotton yellowish green or orange shades, resp., were prepared Thus, 4-(4,6-dichloro-s-triazin-2-yl)thiomorpholine S,S-dioxide [34570-38-2], prepared from cyanuric chloride and thiomorpholine S,S-dioxide, was added to aqueous I (R = H) at 40-5.deg. and pH 8-8.5 to give the azo **dye** (I, R = Q) [**34549-44-5**]. The other azo **dye** (II, R = Q) [34549-45-6] was similarly prepared

L16 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1972:128799 HCAPLUS
DN 76:128799
TI Azo dyes
IN Bosshard, Hans H.
PA Ciba-Geigy A.-G.
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2131706	A	19720105	DE 1971-2131706	19710625
	CH 532114	A	19730215	CH 1970-532114	19700629
	ZA 7103920	A	19720126	ZA 1971-3920	19710616
	GB 1323253	A	19730711	GB 1971-28105	19710616
	CA 941370	A1	19740205	CA 1971-115767	19710616
	FR 2096554	A1	19720218	FR 1971-22489	19710621
	FR 2096554	A5	19720218		
	BE 769122	A1	19711228	BE 1971-105149	19710628
	ES 392694	A1	19730801	ES 1971-392694	19710628
PRAI	CH 1970-9800		19700629		

AB Mono-azo **dyes**, useful for printing cotton washfast yellow shades, were prepared Thus, 1,4-(H2N)2C6H2(SO3H)2-2,5 was treated successively with cyanuric chloride and morpholine at 10-20.deg., the

product coupled with 1-(4-sulfophenyl)-3-methyl-5-pyrazolone, and treated with aqueous NMe3 to give azo **dye** I [**11098-04-7**].
Coupling diazotized 2,4,8-H2NC10H5(SO3H)2 with m-AcNHC6H4NH2 followed by successive reaction with cyanuric chloride at 0-5.deg., morpholine at 30-5.deg., and aqueous Me3N.HCl gave azo **dye** II [11098-03-6].

=>